

## **HISTORY OF THE CANADIAN MACHINE GUN CORPS, C.E.F.**

WRITTEN, February – August, 1919, in Bonn, London and Ottawa by Major H.T. Logan, M.C. and Captain M.R. Levey, M.M., assisted by :-

Brig.-Gen. R. Brutinel, C.B., C.M.G., D.S.O.,

Major W.B. Forster, M.C.,

Lieut. W.M. Baker,

Lieut. P.M. Humme.

(Canadian War Narrative Section. Chateau val Fosse, France; London; Shorncliffe and Ottawa.

## **TABLE OF CONTENTS.**

### **PREFACE.**

### **Part I , Organization.**

I. Introductory.	3
II. Early Period August 4th, 1914, to January 1st, 1916. Infantry Battalion Machine Gun Sections. Brigade Machine Gun Officer.	6
III. 1st Canadian Motor Machine Gun Brigade and attached Batteries. Introductory. 1st Canadian Motor Machine Gun Brigade. Borden Motor Machine Gun Battery. Eaton Motor Machine Gun Battery. Yukon Motor Machine Gun Battery. Grouping of Motor Machine Gun Units.	13
IV. Brigade Machine Gun Companies; December, 1915, to August, 1917. Introductory. Formation of Canadian Machine Gun Companies. First Divisional Machine Gun Companies. Second Divisional Machine Gun Companies. Third Divisional Machine Gun Companies. Fourth Divisional Machine Gun Companies. Advantages of Company Organization.	36
V. Appointment of Corps and Divisional Machine Gun Officers. Canadian Corps Machine Gun Officer (October 29th, 1916). Divisional Machine Gun Officer (December 1st, 1916).	60
VI. Reinforcements and Instruction; 1914 – 1916 Supply of Reinforcements. Machine Gun Instruction.	66
VII. Increase of Machine Gun Strength; Special Instruction: January to March 1917. Formation of Divisional Machine Gun Companies. Canadian Machine Gun School for Officers.	76
VIII. Resume of Machine Gun Strength; March 31st, 1917.	82
IX. Formation of Canadian Machine Gun Corps; (April 16th, 1917).	88
X. Provisional Formation of Divisional Machine Gun “Battalions”. Introductory. Organization. Assembling of “Battalions”. Observations on “Battalion” Organization.	95
XI. Improvement in Instructional and Reinforcing arrangements. Formation of Machine Gun Wing, Canadian Corps School; August 18th, 1917. Officers’ Course Syllabus. N.C.O.s’ Course Syllabus. School for Anti-Aircraft Firing; January 1st. 1918. Formation of C.M.G.C. Reinforcement Depot; September 15th, 1917.	106
XII. Formation of 2-Company Machine Gun Battalions; February 22nd, 1918. Authorization of New Establishment Organization and Provision of Personnel. Details of each Units Reorganization.	131
XIII. Final Organization 3-Company Machine Gun Battalion; May 6th, 1918. The New Establishment Tested; May 6th to November 11th, 1918.	150
XIV. Notes on Organization and Employment of Machine Gun Battalions.	165

Organization.  
Tactical Employment.  
Command.  
Liaison.  
Communications.  
Training.  
Duties of Divisional Machine Gun Commander.

XV. Formation of 2 Cdn. Motor M.G. Brigades; December 25th, 1917, to May 31st, 1918.

Introductory.

Application for Formation of a 5-Battery M.M.G. Brigade.

Application for Formation of 2nd Cdn. M.M.G. Brigade; February 19th, 1918.

Formation, 2-Motor M.G. Brigades – Fifth Division M.G. Companies.

XVI. Formation of Canadian Corps Machine Gun School; May 6th, 1918.

206

XVII. Formation of Machine Gun Wing, Canadian Corps Reinforcement Camp; June 10th, 1918.

XVIII. Conclusion.

219-232

Growth of Canadian Machine Gun Corps.

Nominal Roll of Officers; November 11th, 1918.

Influence of Canadian Corps Machine Gun Policy.

Canadian and British Machine Gun Policy.

## PART I.

### **ORGANISATION.PREFACE**

The History of the Canadian Machine Gun Corps as told in the following pages requires no apology. As with other Formations, so with this Branch of the Canadian Overseas Services, to tell the full story of it, to deal adequately with the heroic deeds of Officers and Men, to trace in detail the intricate course of development of Organization, Tactics, and Machine Gun Science, to describe Operations with clearness, fullness, and accuracy, would necessitate far more time and study than it has been possible to give in the preparation of this History.

An effort has been made, however, to make the Narrative complete and accurate so far as time and available information would allow. Each Unit of the Canadian Machine Gun Corps was asked to prepare an account of its own war achievements; many Officers of the Corps with special knowledge or experience in the Field contributed their quota of information; Machine Gun War Diaries, official Reports, correspondence, etc., were studied, and, in addition to these sources, War Diaries of the Canadian Corps, Canadian Divisions and Brigades were searched in an endeavour to maintain a proper perspective for the Machine Gun Corps in relation to other Branches of the Service.

Perhaps some explanation should be made of the method of arrangement adopted. The story of how the Canadian M.G. Corps struggled into being and eventually became one of the most vital and thoroughly efficient fighting Formations in the Service is of intense interest, taken by itself, quite apart from the story of the fighting. It is realized that the steps in the formation of the Corps and its subsequent growth, the instructional work done within the Corps, the supply and disposal of Reinforcements, and such kindred subjects, have all had an intimate connection with the progress of the fighting and the needs of the Campaign. Yet, as in biography a distinction is justly made between private and public life, so here it was considered legitimate, and for purposes of instructional interest, advisable, to deal with the Organization of the Machine Gun Corps, its physical appearance and intellectual interests, so to say, in a separate part, and to narrate its more public and popular achievements by themselves consecutively from the beginning.<sup>1</sup>

The only apparent exception to this method occurs in the treatment of "Brutinel's Brigade" whose Organization is described along with Operations carried out by that Force. But in this case we are dealing with a Force somewhat artificially organized, hastily composed, and as hastily disbanded when its work was done; in the case of the Units of the Machine Gun Corps proper, the form which their Organization ultimately took was the result of long and varied experience in the Field and had many lessons in its story for the Machine Gunner of the Future.

The first part of the History is therefore devoted to the birth and growth of the Corps with its various Units as they existed at the time of the Armistice. Part II deals with Operations, and, quite generally, with the life and activities of Machine Gun Units in the Field.

---

<sup>1</sup> Narrative of Operations still incomplete. vid. Introduction to Part II.

## I.

### INTRODUCTORY.

#### **Development of M.G. Service.**

There have been many amazing developments in Military Science during the period of the War; not the least remarkable of these is the development in the use of the Machine Gun and quick-firing rifle. In August, 1914, a British Infantry Battalion was equipped with 2 Machine Guns; in November, 1918, each Battalion had on its Establishment 36 Lewis Automatic Rifles, commonly known as Lewis Guns. In August, 1914, a British Infantry Division had no Machine Guns except those on the Establishment of its own Battalions; in November, 1918, each British Division had in addition to the Infantry-Battalion Lewis Guns, a Machine Gun Battalion with 64 Vickers Guns. At the outbreak of War Machine Guns were controlled in action entirely by Infantry Commanders, and training in Machine Gunnery was regarded and carried out as a sort of advanced Musketry. The progress of the War witnessed the formation of the British Machine Gun Corps on October 22nd, 1915, and the gradual building up of a special Machine Gun Branch of the Service, akin to the Infantry, Artillery and other Arms, and with highly-developed Tactics of its own.

#### **Canadian M.G. Corps.**

In all this Machine Gun development the Canadian Corps not merely kept pace with the advance, but also, in certain important directions, led the way. The conclusion of the Armistice found the Canadian Machine Gun Service organized into an independent Formation, the Canadian Machine Gun Corps: this Organization consisted of : (a) a Corps Headquarters; (b) 4 Vickers Gun Battalions – 1 for each Division – each Battalion with 96 Vickers Guns; (c) 2 Motor Machine Gun Brigades of 40 Guns each, and Motor Transport Company; (d) a School of Machine Gun Instruction; and (e) a Reinforcement depot in France with a permanent Staff of its own. In addition a Canadian Machine Gun Squadron and a large Reinforcement Depot, in England, were technically Units of the Corps, but not administered by it. The former, forming part of the Canadian Cavalry Brigade, operated with a British Cavalry Division and so was usually detached from the Canadian Corps. The latter was administered by the O.M.F.C. in England.

#### **Personnel.**

The important role to be played by Machine Guns was early realized and an effort put forward in the selection and training of Personnel to make the Canadian Machine Gun Corps a “Corps d’élite”: the high state of discipline and technical efficiency shown by our Machine Gunners, under the varying conditions of the Western Campaign, is adequate testimony to the success of that effort.

#### **M.G. Battalion.**

Boldness and initiative have characterized the Machine Gun Corps, not less in organization than in the Field; and the result of a determined attempt to have the Establishments of the tactical Units keep pace with the needs of the campaign was the formation of a Machine Gun Battalion, with an Organization quite different from a British Machine Gun Battalion and peculiar to the Canadian Corps.

#### **Motor M.G. Organization.**

Another feature peculiar to our own Machine Gun Service is the form of our Motor Machine Gun Organization. On November 12th, 1914, the British Motor Machine Gun Service was formed, in accordance with which 1 Motor Battery of 6 Machine Guns was to be added to each Infantry Division. These Batteries were withdrawn from the British Divisions in the summer of 1916, and were finally grouped together, in 1918, into a Motor Machine Gun Brigade consisting of 5 Eight-Gun Batteries. When the First Canadian Division came to England there came with it 2 Motor Batteries of 10 Machine Guns each. On November 11th, 1918, the Canadian Corps possessed 2 Motor Machine Gun Brigades, each of 5 Batteries. These were Corps Troops, forming a Mobile Reserve at the disposal of the Corps Commander.

In the following pages is told the story of the genesis and growth of the Canadian Machine Gun Corps, and of the evolution of the Units administered by it in the Field, viz. A Machine Gun Battalion, a Motor Machine Gun Brigade, a Machine Gun School, a Machine Gun Reinforcement Depot.

## II.

### EARLY PERIOD: FORMATION OF FIRST CANADIAN DIVISION TO ORGANISATION OF MACHINE GUN COMPANIES, AUGUST 4TH, 1914, TO JANUARY 1ST, 1916.

#### INFANTRY BATTALION MACHINE GUN SECTIONS.

##### Original Establishment.

The outbreak of War found the British Army vastly inferior to that of the enemy in the numbers of Machine Guns in possession. It is calculated that, in August 1914, Germany was already provided with 1600 Machine Guns<sup>2</sup>. The Personnel to serve these Guns was organized into Companies, one to each Infantry Regiment, and into specially-trained "Detachments" which were used where most needed. The Machine Gun Strength of the British Army was based upon the Machine Gun Establishment of Infantry and Cavalry Units. In August, 1914, each Infantry Battalion had 2 Machine Guns, with Establishment in Personnel and Transport as follows:

Personnel					Transport		
Detail	Officers	S/Sergeants & Sergeants	Rank and File	TOTAL	Detail	Vehicles	Light Draught Horses
Lieutenant	1			1	Limbered G.S. Wagons		
Sergeant		1		1	for 2 Machine Guns,		
Corporal			1	1	Tripods and		
Privates			12	12	Ammunition	1	2
Drivers					Cart, S.A.A.	1	2
(1st Line Transport)			2	2			
Batman							
(Fully Armed and Trained)			1	1			
TOTAL M.G. SECTION	1	1	16	18		2	4

It was upon this Establishment that the Machine Gun Section of the First Canadian Division Battalions were organized when raised in Canada. With the exception of the P.P.C.L.I., which had Vickers Guns, all the Battalions were initially equipped with Colt Machine Guns, procured by the Canadian Government in the United States. The two Guns issued by the Government to each unit were, in very many cases, supplemented by the addition of two or more Guns presented by individuals, or Corporations of the districts or towns where the Battalions were recruited.

##### Increase in Establishment.

In December, 1914, while the First Division was on SALISBURY PLAIN, the first increase in Machine Gun Establishment of the British Army took place. The number of Guns of a Machine Gun Section was increased to 4 and the Personnel from 18 to 35. The new Establishment was as follows:-

Personnel	Transport
-----------	-----------

<sup>2</sup> Subsequent increases in the Machine Gun Strength of the German Forces are shown by the following figures:-

Date	No. M.G.s in Possession
December, 1915	8,000
July, 1916	11,000
January, 1917	16,000
January, 1918	32,000 Heavy, 37,000 Light

Detail	Officers	S/Sergeants & Sergeants	Rank and File	TOTAL	Detail	Vehicles	Light Draught Horses
Lieutenant	1	2		1	Limbered G.S. Wagons		
Sergeant				2	for 4 Machine Guns,		
Corporal			1	1	Tripods and		
Privates			24	24	Ammunition	2	8
Drivers					Cart, S.A.A.	2	4
(1st Line Transport)			6	6			
Batman			1	1			
(Fully Armed and Trained)							
TOTAL	1	2	32	35		4	12

As a result of this increase in Establishment some First Division Battalions crossed to France in February, 1915, with as many as eight Colt Guns, fully manned with trained or partially trained crews.

### **BRIGADE MACHINE GUN OFFICER.**

#### **Authorization.**

The co-ordination of Machine Guns on a frontage greater than that of a Battalion in offensive and defensive Operations was a feature in Machine Gun Tactics which became prominent very early in the War. With the increase in Machine Gun Establishment the problems of siting Machine Guns for the Defence of a Brigade Frontage, of arranging for their employment in Attack, of effecting their Relief and other tactical matters, placed an additional burden upon Brigade Staffs. It soon became the practice for the Senior Machine Gun Officer of the Battalions of a Brigade to assist the G.O.C. in tactical matters affecting the Machine Guns, and in the Winter of 1914-15 a definite appointment was created by the War Office of a Brigade Machine Gun Officer for each Brigade.

#### **Appointments.**

When the First Division went to France, the Brigade Machine Gun Officers were already functioning, and the following Officers were appointed to this position:-

1st Brigade	Captain W.J.A. LALOR
2nd Brigade	Lieut. G.C.St.P. de DOMBASLE
3rd Brigade	Major P.F. VILLIERS

Captain LALOR held this appointment until the formation of Brigade Machine Gun Companies. Lieut. de DOMBASLE (now Lieut.-Col. de Dombasle, Director of Canadian Air Service) was succeeded by Captain T.H. RADDALL in October, 1915. Major VILLIERS gave place to Captain E. BRISTOL in July, 1915, and the latter when wounded in December, was succeeded by Captain E.H. HOUGHTON, who remained B.M.G.O. of the 3rd Brigade until the 3rd Machine Gun Company was formed.

In the Second Division the position was held by the following Officers:-

4th Brigade	Lieut. J. EDWARDS
5th Brigade	Lieut. S.W. WATSON
6th Brigade	Lieut. H.A. WEBB

Of these Officers Lieut. EDWARDS and Lieut. WATSON commanded 4th and 5th Brigade Machine Gun Companies respectively, on their formation.

Brigade Machine Gun Officers functioned for a short time also in the Third Division: those holding the appointment were:-

7th Brigade	Captain H.T. COOK, who later commanded the 7th M.G. Company.
8th Brigade	Captain W.M. BALFOUR, the first C.O. of the 8th M.G. Company.
9th Brigade	Captain W.H. BOTHWELL, who commanded the 9th Brigade Machine Gun Company on its formation.

### **Duties of B.M.G.O.**

The duties of the Brigade Machine Gun Officer were, quite generally, to assist and advise the G.O.C. Brigade in all matters pertaining to Machine Guns: but he did not have the authority over Machine Guns in Action, except such Guns as were held in Brigade Reserve or explicitly placed under his command by the Brigadier. The Machine Guns remained with their Battalions for Command as well as administration, each Battalion Machine Gun Section being immediately under the Battalion Machine Gun Officer.

The B.M.G.O. was virtually a Liaison Officer between the Brigade Staff and the 4 Battalion Machine Gun Officers in the Brigade. During normal periods of holding the line he advised the G.O.C. as to dispositions of Machine Guns, and often issued orders for the G.O.C. indicating changes of disposition and moves of Guns to more advantageous positions. He superintended the placing of Guns in Front and Support Lines. He made arrangements with his opposite B.M.G.O. for the Relief of the Battalion Machine Gun Sections. During an Artillery Demonstration of the 3rd Brigade Front on October 14th, 1915, the Infantry Garrison, except a few Sentries and certain Machine Guns, was withdrawn from the Front Line. The B.M.G.O. detailed the Machine Guns to be withdrawn from this Operation and those to be left in the Front Trenches. For special Operations where fire co-operation was required within the Brigade, the B.M.G.O. made such arrangements as were necessary. Thus in the Operation Order dealing with an Artillery Demonstration and wire-cutting Operation on the 6th Brigade Front, dated November 24th, 1915, the B.M.G.O. was instructed to "arrange for burst of long range enfilading fire on the enemy's communication trenches and support lines in the vicinity of the bombardment, commencing at Noon". During periods of rest and training this Officer co-related Machine Gun instructional work for the Brigade, and made arrangements for any special Schools of Instruction, formed within his own Brigade. If outside Gun Sections were attached for Instruction, he supervised such work as they carried out. From the 16th to the 19th October, 1915, Machine Guns of the 42nd Battalion were attached for periods of 24 hours to the Machine Guns of the 3rd Brigade in the trenches. It was the duty of the B.M.G.O., 3rd Brigade, to "arrange to instruct the detachments in Machine Gun Tactics."<sup>3</sup> In the exercise of all his duties the Brigade Machine Gun Officer acted in close co-operation with the Battalion Machine Gun Officers.

This was the Organization and system of control under which the Infantry Machine Guns of the Canadian Corps fought in the 1915 engagements, – 2nd Battle of YPRES, FESTUBERT and GIVENCHY – and under which they continued to function until Brigade Machine Gun Companies were formed in the Winter of 1915-16.

---

<sup>3</sup> Program of Training, 3rd Brigade, October 16th-24th, 1915.



### **III.**

## **FIRST CANADIAN MOTOR MACHINE GUN BRIGADE AND ATTACHED BATTERIES.**

### **INTRODUCTORY.**

While the Infantry Battalion Machine Gun Sections were in this transition stage of Brigade Machine Gun Officer supervision, there already existed, in the Canadian Overseas Forces, Machine Gun Units which, in form, foreshadowed the Machine Gun Company Organization. The First Canadian Motor Machine Gun Brigade, and the 3 Motor Machine Gun Batteries eventually attached to the Brigade – the Borden, Eaton and Yukon Batteries – were, from the time of formation, independent Machine Gun Units, complete with tactical and administrative Staffs and provided with their own Transport. Theoretically these units formed a Divisional Mobile Reserve of Machine Guns, making the Canadian Organization conform with the British Divisional Establishments, which included a Motor Machine Gun Battery with each Infantry Division. For some months the Canadian Motor Machine Gun Batteries did operate with Divisions in this way – the 1st C.M.M.G. Brigade with the First Division, the Borden Battery with the Second, the Eaton with the Third, while the Fourth Division had the Yukon Battery. But by August 19th, 1916, all 3 Motor Machine Gun Batteries were attached for tactical Operations to the 1st C.M.M.G. Brigade, and, from this time on, all were employed as a Corps Mobile Reserve of Machine Guns.

The 1st C.M.M.G. Brigade and the Borden and Eaton Batteries used the Colt Gun until August 9th, 1916, when they were issued with Vickers Guns. The Yukon Battery was equipped with the Vickers before leaving England.

### **FIRST CANADIAN MOTOR MACHINE GUN BRIGADE.**

#### **Authorization; Initial Establishment.**

The First Canadian Motor Machine Gun Brigade was the earliest Motor Machine Gun Unit in the Corps. At the time of its formation it was officially known as “The Automobile Machine Gun Brigade No. 1.” On September 2nd, 1914, the Brigade was authorized as a Unit in the Canadian Overseas Expeditionary Force. The authority for its formation is contained, under Mobilization Orders, in a report of the Privy Council Committee, of that date, in part as follows: “The Committee of the Privy Council have had before them a report dated 20th August, 1914, from the Minister of Militia and Defence, representing that it is advisable immediately to organize a Machine Gun Corps as a part of the Canadian Overseas Expeditionary Force, and that several public spirited citizens of Canada have volunteered that at their own sole costs, charges and expenses they will provided and deliver immediately to the Canadian Government:

- 16 Machine Guns
- 8 Armoured Motor Cars
- 6 Trucks
- 4 Automobile Cars for the use of Officers

The said Guns, Cars and Trucks to be of such style, pattern, construction and quality as the Minister and Defence may approve and accept.

“The Minister recommends that this offer be accepted and that he be authorized to receive and take over the said Guns, Cars and Trucks, after they have been duly accepted and approved by him.

“The Minister further recommends that, contingent on his approval and acceptance of the said Guns, Cars and Trucks, authority be granted for the organization of a Unit of the Canadian Overseas Expeditionary Force under the style and title of “The Automobile Machine Gun Brigade No. 1” and that the Establishment of its Personnel be:-

- 1 Major
- 3 Captains
- 5 Subalterns
- 4 Sergeants
- 2 Sergeant Artificers
- 4 Corporals

4 Corporal Artificers  
101 Privates.”

The Order-in-Council also provided for the issue of Clothing, Small Arms and Equipment, for Training, Transportation and for other matters incident to the raising and administration of the new Unit.

#### **Mobilization.**

But much had already been done before the Establishment was officially set forth. When the above mentioned “public spirited citizens”, whose names are still withheld, presented their generous and patriotic offer to the Dominion Government it was at once accepted and permission granted by an Order-in-Council to recruit men for this purpose. Major R. BRUTINEL (now Brigadier-General R. Brutinel, C.B., C.M.G., D.S.O.) was named to command the Unit and to proceed with recruiting. The task proved an easy one and by September, 9th, 1914, the Brigade was complete in Personnel. It was more difficult, however, to obtain Guns and Motor Equipment and it was not until the 21st that the “material” as per Establishment was completed, by which time Major BRUTINEL had succeeded in procuring Guns and Cars (in the United States). Twenty Colt Guns were obtained instead of 16 and 8 Trucks instead of 6 as laid down by the Order-in-Council Establishment: this was the strength in Machine Guns set forth in the new Establishment, published on May 16th, 1915, constituting a Brigade of 2 Ten-Gun Batteries.

#### **Personnel.**

The Unit assembled in OTTAWA. Of the Personnel 20% were ex-soldiers; and 5% had had experience in the Canadian Militia. The remaining 75% had had no military training and was composed of Chauffeurs and Motor Mechanics (50%), University Graduates (10%), and men of various trades (20%). The Officers were seconded from the Militia, many of them giving up their rank for a lower one in the Overseas Unit. Those on the Strength on September 9th, were:

Major R. BRUTINEL	Commanding Officer
Lieut. C.A. BRADBROOKE	Adjutant
Captain J.E. BROWN	O.C. “A” Battery
Captain C.F. HAWKINS	O.C. “B” Battery
Captain H.G. DONNELLY	Q.M., & O.C. Train
Lieut. W.E.C. McCARTHY	
Lieut. M.A. SCOTT	
Lieut. F.A. WILKIN	

The total Strength, All Ranks, was 124.

#### **Composition: Equipment.**

The Brigade was composed of a Headquarters, 2 Batteries of 10 Guns each, and Train. 16 of the Machine Guns were mounted, 2 on each Armoured Car; the remaining 4 were carried, 1 on each Ammunition Lorry. The 8 Trucks were all 30-cwt. Lorries with 2-cylinder Autocar engines. These vehicles were employed during the period of training in England as follows:

Ammunition	4 Lorries
Repair Materials	1 Lorry
Supplies	1 Lorry
Gasoline	1 Lorry
Ambulance	1 Lorry

A number of Bicycles were also taken on the Strength for the use of Cyclists to maintain Communication on the Line of March. These were afterwards found unserviceable for this purpose and were replaced in England by 8 Solo Motor-Cycles.

The Brigade was fully organized by September 23rd, when H.R.H. the DUKE OF CONNAUGHT inspected it, and on September 29th, the Unit embarked at MONTREAL for England.

### **Alterations in Equipment.**

During the 8 months spent in England rigorous Training was carried out under varying conditions, and by Field Days, Alarm Operations, and the conduct of ordinary Routine, the Organization and Equipment underwent a thorough test. As a result of experience gained in this interval, certain alterations were made in Motor Equipment. The 4 Officer's Cars were converted into Transport Cars for Other Ranks. The Bicycles were exchanged for Solos, and a number of Motor-Cycles with Side-Cars (Clyno) were procured to be used to transport the Officers and Repair Sections. The changes increased the flexibility of the Brigade.

### **Increase in Personnel.**

Certain important alterations and additions took place also in the Personnel during the same period. Some wastage in Personnel occurred in the winter of 1914-15. This wastage was made up by drafts from the Reserve Infantry Units of the Canadian Overseas Force in England. On May 16th, 1915, the Establishment was increased from 124 to 168 All Ranks as per Establishment<sup>4</sup> herewith.

#### **FIRST CANADIAN MOTOR MACHINE GUN BRIGADE. (2 Batteries, each of 10 Colt Automatic Guns).**

**WAR ESTABLISHMENTS 61 & 64.**

**(May 16th, 1915 & May 29th, 1915)**

Detail	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	TOTAL	Motor Cars	Bicycles	Motor Cycles
Headquarters	2	1			8	11	1		4
2 Batteries	6		10		122	138	16		12
Trains	1		1	9	8	19	3		1
<b>TOTAL BRIGADE</b>	<b>9</b>	<b>1</b>	<b>11</b>	<b>9</b>	<b>138</b>	<b>168</b>	<b>20</b>	<b>16</b>	<b>17</b>

---

<sup>4</sup> This Establishment was republished on May 29th.

FIRST CANADIAN MOTOR MACHINE GUN BRIGADE.  
WAR ESTABLISHMENT (continued)  
COMPOSITION IN DETAIL.

(i) Personnel.

Detail	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	TOTAL	Motor Cars	Bicycles	Motor Cycles
<u>HEADQUARTERS</u> <sup>5</sup>									
Lieut.-Colonel	1					1			
Adjutant	1					1			
Sergeant-Major		1				1			
Orderly Room Clerk					1	1			
Privates					4	4			
Batmen					2	2			
Drivers					1	1			
TOTAL HEADQUARTERS	2	1			8	11	1		4
<u>BATTERY</u> (2 Batteries)									
Major or Captain	1					1			
Subalterns	2					2			
Sergeants			5			5			
Corporals					5	5			
Privates					45	45			
Batmen					3	3			
Drivers					8	8			
TOTAL BATTERY	3		5		61	69	8		6
<u>TRAIN</u>									
Captain	1					1			
Quartermaster Sgt.			1			1			
Armourer Sgt.				1		1			
Fitters				8 <sup>6</sup>		8			
Privates					4	4			
Batmen					1	1			
Drivers					3	3			
TOTAL TRAIN	1		1	9	8	19	3		1
BASE DETACHMENT (Not included in the above totals)									
Subalterns	1					1			
Storemen					1	1			
First Reinforcement					40	40			
TOTAL	1				41	42			

<sup>5</sup> 1 Medical Officer accompanied the Brigade to France.

<sup>6</sup> 4 Corporals

FIRST CANADIAN MOTOR MACHINE GUN BRIGADE.  
WAR ESTABLISHMENT (continued)  
COMPOSITION IN DETAIL.

(i) Transport.

Detail	Head-quarters		A Battery		B Battery		Train		TOTAL	
	Vehicles	Drivers	Vehicles	Drivers	Vehicles	Drivers	Vehicles	Drivers	Vehicles	Drivers
<u>1st LINE</u>										
Armoured Cars			4	4	4	4			8	8
Motor Cars for personnel	1	1	2	2	2	2			5	5
Motor Cars for ammunition			2	2	2	2			4	4
Motor Cars with side-cars	1		4		4				9	
Motor Cars for inter-communication	3		2		2				7	
TRAIN										
Motor Cars for fuel							1	1	1	1
Motor Cars for repairs							1	1	1	1
Motor Cars for baggage and supplies							1	1	1	1
Motor Cycles for inter-communication							1		1	
Bicycles									14	
TOTAL	5	1	14	8	14	8	4	3	51	20

- Notes: 1. Each armoured car carries 2 guns.  
2. Each ammunition car carries 1 gun.  
3. 5 cars are equipped with water tanks.

**Changes Effectuated.**

The men required to complete this new Establishment were drawn from the Fort Garry Horse, Canadian Cavalry Depot, CANTERBURY. These men were partially-trained Machine Gunners and were readily absorbed in the Brigade. The Vehicles provided for in the Establishment had already been obtained pending authorization.

No Medical Officer was authorized, but the Brigade had an M.O. attached before proceeding to France.

The Base Detail of 1 Officer and 42 Other Ranks were not included in the new Brigade Total of 168 All Ranks. They were to be available in England as Reinforcements.

A short time before the Brigade left England, its original name was changed to the "First Canadian Motor Machine Gun Brigade".

**Officers.**

The Officer Personnel on leaving for France on June 16th, 1915, was composed as follows:

Lt.-Colonel R. BRUTINEL	Officer Commanding
Lieutenant E.D. WALLACE	Adjutant
Captain J.E. BROWNE	O.C. "A" Battery
Lieutenant W.E.C. McCARTHY	
Lieutenant F.A. WILKIN	
Captain C.F. HAWKINS	O.C. "B" Battery
Lieutenant F.M. GARRISON	
Lieutenant M.A. SCOTT	
Captain H.H. DONNELLY	Q.M. and O.C. Train
Captain D. MacCLENNAN	M.O.

### **Arrival in France.**

On its arrival in France the Brigade was attached to the First Division, on June 21st, at VENDIN-LEZ-BETHUNE.

### **Subsequent Alterations.**

From the time of its arrival in France until the radical changes which took place in 1918, when the 2nd Motor Machine Gun Brigade was formed, the 1st C.M.M.G. Brigade remained almost unaltered in Establishment. At the period when the Brigade Machine Gun Companies were struggling into existence, the 1st C.M.M.G. Brigade had already attained its majority.

The only alterations made between June 1st, 1915, and June 1st, 1918, were published on January 30th, 1917, in a new War Establishment<sup>7</sup> for the Brigade. These alterations consisted in the addition to Headquarters of 1 Motor Car and Driver and the attachment to Headquarters of a Medical Officer and 2 Water Details. The Total Personnel was increased in this way from 168 to 172 ALL Ranks. Of the 4 Motor Cycles on Headquarters 1 was specified as provided with a Side-Car, while of the 12 with Batteries, 8 were likewise stated to be equipped with Side-Cars.

This was in reality a belated Establishment as the new elements provided in it had for a long time actually been with the Brigade.

### **Early Activities.**

In the long months of Trench Warfare which followed its arrival in France, such a highly Mobile Force could not of course exercise its full powers, it operated very much as a Brigade Machine Gun Company, Batteries doing Tours in the Line with Brigades. The Brigade actually did duty as a Machine Gun Company for the 3rd Brigade during the months of March, April and May, 1916, until the newly formed 3rd Machine Gun Company was equipped with Guns.

## **BORDEN MOTOR MACHINE GUN BATTERY.**

### **Mobilization; Initial Establishment.**

When the First Canadian Motor Machine Gun Brigade had been serving in France for 3 months, the Borden Motor Machine Gun Battery arrived with the 2nd Canadian Division on September 15th, 1915.

This Unit, originally known as "Borden's Armoured Battery", was raised through the private enterprise of certain public-spirited citizens and recruited in OTTAWA and in the PORCUPINE and COBALT Districts of Northern Ontario. On December 4th, 1914, the Personnel, 50% of whom were Chauffeurs and Motor Mechanics, assembled in the Peel Street Barracks in MONTREAL, and on January 15th, 1915, moved to new quarters in the Armoury of the 1st Grenadier Guards of Canada. On December 10th, the Department of Militia at OTTAWA authorized the mobilization of the Unit, and Major E.J. HOLLAND, V.C., who had seen service in the South African Campaign and had done most of the recruiting, was made its first Commanding Officer.

The initial Establishment consisted of:

	6	Officers
	1	Warrant Officer
	8	Sergeants
	9	Corporals
	<u>45</u>	Privates
TOTAL	<u>69</u>	

### **Original Officers.**

In the Spring of 1915, 3 or 4 Colt Guns were secured, but no Motor Equipment was received in Canada. Training in Drill, Musketry and Machine Gunnery was, however, carried out until May 15th, when the Battery proceeded to QUEBEC, and left for England the next day. At this time the following Officers were serving with the Unit:

---

<sup>7</sup> W.E. 461.

Major E.J. HOLLAND, V.C.	Officer Commanding
Captain P.A.G. MacCARTHY	2nd in Command
Lieut. W.F. BATTESBY	
Lieut. C.B. GRIER	
Lieut. E.H. HOLLAND	
Lieut. J.H. RATTRAY	
Lieut. J.R. RYAN	

### Re-organization.

From the time of their arrival in England until September 3rd Training was carried on and consisted of General Machine Gun Training, Map Work and Range Practices at HYTHE Ranges, which were situated close to CAESAR'S CAMP in the SHORNCLIFFE Area. In this period the Battery was organized on the basis of a 6-Gun British Motor Machine Gun Battery, and was re-named the "Borden Motor Machine Gun Battery". Motor Equipment was issued on September 4th, consisting of:

Scott Tri-Cars (Second Hand)	18
Triumph Motor Cycles	9
Motor Cars (with Box Bodies) Studebaker, 15 cwt.	<u>5</u>
<b>TOTAL</b>	<b><u>32</u></b>

The following week was spent in intensive Training in Drill and Tactics with the Motor Equipment. The Scott Tri-Cars were found to be in poor condition and unreliable. These Motor Cycles and Side-Cars proved particularly troublesome on September 12th and 13th, when the Battery was moving by road from the SHORNCLIFFE Area to SOUTHAMPTON, prior to Embarkation for France.

The Establishment of the Battery was as follows:

**MOTOR MACHINE GUN BATTERY.**  
(6 Machine Guns).  
WAR ESTABLISHMENT 92 A., August 1st, 1915.  
Composition in Detail.  
(i)

Detail	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	Total	Motor Cycles
Major or Captain	1					1	1
Subalterns	3					3	3
Battery Sergt.-Major		1				1	1
Sergeants			3			3	
Corporals					3	3	
Privates <sup>8</sup>					36	36	
Scouts <sup>9</sup>					4	4	4
ATTACHED A.S.C.							
Motor Car Drivers					5	5	
Fitters				3		3	
<b>Total Battery</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>48</b>	<b>59</b>	<b>9</b>

**MOTOR MACHINE GUN BATTERY.**  
**WAR ESTABLISHMENT (continued).**

Notes:- 1. This Unit is divided into 3 Sections, each consisting of 2 guns, 6 Motor Cycles with Side-Cars and one Motor Car (with box body) are provided for the service of each Section carrying gun detachments and ammunition as follows:-

Each No. 1. Motor Cycle with Side-Car carried guns, 2 men and 1,350 rounds S.A.A.

<sup>8</sup> Includes Officers' Batmen and men for handling Ammunition and to replace Casualties.

<sup>9</sup> Includes 1 Lance Corporal

Each No. 2. Motor Cycle with Side-Car carried guns, 2 men and 1,350 rounds S.A.A.

Each No. 3. Motor Cycle with Side-Car carried 1 Sgt. (or Cpl.), 1 man and 2,700 rounds S.A.A.

Each Motor Car carries Driver, Mechanic, Spare Man and 10,500 rounds S.A.A.

2. 2 Armament Artificers for repair of Guns are stationed at the Advanced Mechanical Transport Base.

**MOTOR MACHINE GUN BATTERY.  
WAR ESTABLISHMENT (continued).  
COMPOSITION IN DETAIL.**

(ii) Transport

Detail	Vehicles	Drivers
1st Line		
Motor Cycles for Commanders and Subalterns	4	
Motor Cycles for Battery Sergeant-Major	1	
Motor Cycles for Scouts	4	
Motor Cycles with Side-Cars:-		
For Guns	6	
For Men and Ammunition	12	
Motor Cars (with Box Bodies) for spare Men and Ammunition	3	3
SUPPLY COLUMN.		
Motor Cars (with Box Bodies) for Baggage and Supplies <sup>10</sup>	2	2

**Arrival in France.**

The Borden M.M.G. Battery arrived at LE HAVRE on September 15th, 1915. On this date the following Officers were serving with it:

Major E.J. HOLLAND, V.C.	Officer Commanding
Captain P.A.G. MacCARTHY	
Lieut. W.F. BATTERSBY	
Lieut. E.H. HOLLAND	
Lieut. J.H. RATTRAY	

**Replacement of Motor Equipment.**

After spending 10 days in Camp at SANVIC, a suburb of LE HAVRE, the Battery proceeded to ROUEN. Here, the Scott Tri-Cars, which had proved so unreliable, were turned in to the Ordnance Depot and were replaced on October 18th by Clyno Motor Cycles and Side-Cars. On October 4th, the Personnel, partly by train and partly by road with what remained of their Transport, proceeded via ABBEVILLE and BAILLEUL to WESTOUTRE, where they arrived on the 5th.

**Early Activities.**

During the Winter of 1915-16, and the Spring of 1916, the Borden Battery operated under orders of the 2nd Canadian Division, as Divisional Troops, organizing and manning defensive positions and carrying on night firing in the VIERSTRAAT Sector and the YPRES SALIENT. On July 12th, the Battery was attached to the First Canadian Motor Machine Gun Brigade, as "C" Battery, and came under the O.C. of that Unit for all Tactical Operations.

---

<sup>10</sup> Provided from Divisional Supply Column.



## **EATON MOTOR MACHINE GUN BATTERY.**

The Eaton Motor Machine Gun Battery crossed to France from England on the night February 24th/25th, 1916, and operated as Divisional Troops under the Third Canadian Division.

### **Initial Organization.**

This Unit, originally known as the Eaton Machine Gun Brigade, was recruited in Toronto. In December, 1914, Mr. J.C. Eaton, (now Sir JOHN EATON) offered to the Canadian Government to raise and equip at his own expense a Battery of Machine Guns mounted on 15 Armoured Cars. The Dominion Government accepted his munificent offer and on January 8th, 1915, the following Establishment, prepared by Capt. W.J. Morrison, was approved:-

Personnel	Motor Vehicles
10 Officers	17
1 Warrant Officer	
9 Staff Sgts. And Sgts.	
64 Artificers	
17 Drivers	
101 Total	

On February 8th, 1915, the following increase in the Establishment of the New Unit was authorized:-

Personnel	Motor Vehicles
14 Officers	32
17 Staff Sgts. And Sgts.	
117 Artificers	
32 Drivers	
180 Total	

The addition of an Adjutant to the Establishment was approved on May 13th, 1915.

All the officers, N.C.O.s and Men had to be qualified Mechanics, Chauffeurs and Machine Gunners. By the end of February 1915, the Unit was almost up to Strength, and Personnel was being trained in Infantry and Rifle Drill, and also in the Driving and Repairs of Cars. The Mechanism of the Colt Automatic Machine Gun commenced in April, 1915, when 4 Guns were allotted to the Unit for Instructional Purposes.

In May, 1915, the Eaton Machine Gun Brigade proceeded from Toronto to Niagara Camp, Ontario. It remained there until June 3rd, 1915. The following day, June 4th, the Unit consisting of 24 Officers and 254 Other Ranks embarked at Montreal on the S.S. "Metagama".<sup>11</sup> The names of the Officers who proceeded from Canada to England are shown below:-

Commanding Officer	Major W.J. Morrison
Adjutant	Captain K.L. Knight
Quartermaster	Lieut. W.A. Holloway
Paymaster	Lieut. A.S. Jarvis
	Lieut. F.O.G. Wood
Lieut. H.R. Aird	Lieut. G.A. McLean
Lieut. C.L. Bath	Lieut. P.M. Murdoch
Lieut. C.E. Burden	Lieut. J.N. Ormsby
Lieut. J. Fish	Lieut. E. Osborne
Lieut. E.W. Farrow	Lieut. G.A. Poterfield
Lieut. F.A. Hale	Lieut. L.B. Scardifield
Lieut. C.H. James	Lieut. H.W. Scardifield
Lieut. H.C. Lefroy	Lieut. G.A. Scroggie
Lieut. J. Mess	Lieut. G.O. Usborne
Lieut. T.R. Young	

---

<sup>11</sup> The Motor Vehicles and Machine Guns of the Eaton Motor Machine Gun Battery were not sent to England.

After their arrival in England a large proportion of the Personnel of the Eaton Machine Gun Brigade was sent as Machine Gun Drafts to Units in France.

### **Reorganization.**

In February 1916, a Machine Gun Battery similar in Establishment to the Borden Battery<sup>12</sup> was Organized at Shorncliffe Camp, England. The Personnel of this Battery, which was named the Eaton Motor Machine Gun Battery, was drawn from the Eaton M.G. Brigade. On the night February 24th/25th, the Battery embarked at Southampton and disembarked the following morning at Le HAVRE. After 2 days' stay at Rest Camp, the Personnel of the Battery proceeded by Train and Transport by Road to GODEWAERSVELDE, a village 7 miles N.-W. of BAILLEUL. On March 25th, under Orders of the Third Cdn. Division, they had their first experience in the Line, relieving the 72nd Brigade M.G. Company in the ZILLEBEKE Sector. The Battery continued to serve as divisional Troops to the Third Cdn. Division until joining the 1st C.M.M.G. Brigade at POPERINGHE on July 12th, 1916, when they became "D" Battery of the Composite Brigade.

The following Officers were serving with the Battery on its arrival in France:-

Lieut. W.A. Holloway  
Major E.L. Knight  
Lieut. P. McMurdoch  
Lieut. E. Osborne

### **YUKON MOTOR MACHINE GUN BATTERY.**

#### **Origin of Unit.**

In the Winter of 1914-15, Mr. (now Lieut.-Colonel) J.W. BOYLE, of DAWSON CITY, Yukon Territory, raised at his own expense a body of 50 men known as the "Boyle Mounted Machine Gun Detachment". These men he brought to OTTAWA, and from there they were sent to England, where they were attached to the Eaton Motor Machine Gun Brigade then in Camp in the SHORNCLIFFE Area. There was no Establishment for the Detachment at this time. They remained here through the Winter of 1915-16, receiving some Training at the Canadian Machine Gun School, Napier Barracks. Some of the Personnel joined Units in the Field during this period.

#### **Re-organization and Training.**

On June 14th, 1916, what remained of the Detachment, numbering 33, were mobilized as the "Yukon Motor Machine Gun Battery" at the Canadian Cavalry Depot, SHORNCLIFFE. Captain H.F.V. MEURLING, from the Instructional Staff of the Canadian Machine Gun School, was placed in Command. Other Ranks required to complete Establishment<sup>13</sup> were drawn from Infantry Reserve Battalions and the Canadian Cavalry Depot. Motor Car Drivers and Fitters were received from the C.A.S.C. By June 23rd, the Establishment of Other Ranks was complete. As no guns or Motor Equipment had been issued, Training consisted of Infantry Drill, Route Marching and preliminary Machine Gun Work.

#### **Motor Equipment.**

On July 23rd, the Battery proceeded by train to BRAMSHOTT to join the Fourth Division as Divisional Troops. Here Training along similar lines was continued. On the 18th, part of the Motor Equipment was drawn, consisting of:

Motor Cycle and Side-Cars, Clyno, 2 Cyldr., 5 H.P.	
Side-Car for O.C. Battery	1
Type "A" (with Gun Carriage)	6
Type "B" (with Ammunition Carriage)	6
Motor Cars (with Box Bodies):	
Napier, 4 Cyldr., 20 H.P.	5
TOTAL	<u>18</u>

---

<sup>12</sup> See Page 26.

<sup>13</sup> For Establishment see Page 26.

Further installments of vehicles were issued before leaving England; the last of the Motor Side-Car Cycles were received at the Docks at SOUTHAMPTON prior to sailing. Vickers Guns were drawn in the first week of August, 1916.

#### **Arrival in France.**

On August 12th, the Battery crossed to France with the Fourth Division, and proceeded to ABEELE on the boundary between France and Belgium, about 5 miles S.W. of POPERINGHE, on the main ST. OMER Road. Here they joined the 1st C.M.M.G. Brigade as "E" Battery. 12 days were spent in Training in the Vickers Gun under Instructors loaned by the 1st C.M.M.G. Brigade, and some Instructional Work was done in the Line at the same time. The Battery began its first Tour on September 1st, when it took up positions on the Left of the Fourth Division, just across the YPRES-COMINES CANAL, in support of the 2nd Australian Infantry Brigade.

The Officers who proceeded to France with the Yukon Battery were:

Captain H.F.V. MEURLING,	Officer Commanding
Lieut. R.D. HARKNESS	
Lieut. W.C. NICHOLSON	
Lieut. H.H. STRONG.	

#### **GROUPING OF MOTOR MACHINE GUN UNITS.**

On July 12th, 1916, the Borden Motor Machine Gun Battery and the Eaton Motor Machine Gun Battery were attached to the 1st C.M.M.G. Brigade for Tactics.

On August 19th, the Yukon Motor Machine Gun Battery was attached to the Brigade for Tactics, and from this date the Motor Machine Gun Units of the Canadian Corps, though administratively self-contained, were normally kept together under the single Tactical Command of the Officer Commanding the 1st C.M.M.G. Brigade. At this date, therefore, Canadian Infantry Divisions ceased to have a Motor Machine Gun Battery on their Strength. The entire Motor Machine Gun Strength of the Corps became the Corps Troops and were allotted special tasks with the various Divisions at the discretion of the Corps Commander.

Under this loosely compacted Organization the First Canadian Motor Machine Gun Brigade and the Borden, Eaton and Yukon Batteries fought in the battles of the SOMME, in 1916, VIMY RIDGE, ARLEUX, FRESNOY, HILL 70 and PASSCHENDAELE in 1917, and with this Organization they too so large a part in stemming the German Advance on AMIENS in March and early April, 1918.

## **IV.**

### **BRIGADE MACHINE GUN COMPANIES. DECEMBER, 1915, TO AUGUST, 1917.**

#### **INTRODUCTORY.**

When the Yukon Motor Machine Gun Battery arrived in France with the Fourth Division in August, 1916, the entire Machine Gun organization of the Army had been changed. The Motor Machine Gun Batteries were now no longer the only self-contained Machine Gun Units, but each Infantry Brigade included a Machine Gun Company of 16 Guns complete with tactical and administrative Staffs.

#### **Evolution of Company Organization.**

The idea of centralized control of Brigade Machine Guns grew up with the increase and gradual definition of duties of the Brigade Machine Gun Officer. His assumption of tactical functions and his supervision of Training of Brigade Machine Guns made the transition to Brigade Machine Gun Companies a comparatively simple one. It involved simply the addition of administrative to training and tactical duties, the grouping together of Guns in a cohesive and self-contained Unit, and the provision of necessary increases in Personnel for the smooth working of the new Organization.

The first Establishment for a Brigade Machine Gun Company was authorized in November, 1915<sup>14</sup>. This Establishment provided for 9 Officers and 141 Other Ranks, or 150 All Ranks. It is seen that this is virtually the same as the total of 4 Battalion Machine Gun Sections<sup>15</sup>, with the addition of specialist Personnel. Four Battalion Sections would number 141, including the B.M.G.O. The Company was provided with 16 Guns and its own Transport.

---

<sup>14</sup> A.O. 414/1915 Appendix.

<sup>15</sup> See Page 8.

**MACHINE GUN COMPANY.**  
(Headquarters and 4 Sections each of 4 Guns).  
**WAR ESTABLISHMENT A.O. 414, November, 1915.**

	Personnel						Horses				
	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	TOTAL	Riding	Draught	Heavy Draught	TOTAL	Bicycles
Headquarters (excluding Attached)	1	1	2	2	26	32	1	3		4	
Attached	8		8		2	2	8	40		48	
Four Sections					100	116					
<b>TOTAL COMPANY (excluding Attached)</b>	9	1	10	2	126	148	9	43		52	
<b>TOTAL COMPANY (including Attached)</b>	9	1	10	2	128	150	9	43		52	

**MACHINE GUN COMPANY.**  
**WAR ESTABLISHMENT (continued)**  
**COMPOSITION IN DETAIL.**  
(i) Personnel & Horses.

	Personnel						Horses				
	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	TOTAL	Riding	Draught	Heavy Draught	TOTAL	Bicycles
HEADQUARTERS											
Major or Captain	1					1	1			1	
Company Sergeant Major		1				1					
Company Q.M. Sergeant			1			1					
Transport Sergeant			1			1					
Artificer				1		1					
Shoeing-Smith				1		1					
Signallers					4 <sup>17</sup>	4					
Privates					16 <sup>18</sup>	16					
Drivers					2	2		3		3	
Storemen					1	1					
Cooks					2	2					
Batmen <sup>16</sup>					1	1					
<b>TOTAL HEADQUARTERS (excluding Attached)</b>	1	1	2	2	26	32	1	3		4	4
ATTACHED											
R.A.M.C.					2	2					
Drivers A.S.C. <sup>19</sup> (Train Transport)					1	1			2	2	
<b>TOTAL HEADQUARTERS (including Attached)</b>	1	1	2	2	28	34	1	3		4	4

<sup>16</sup> Fully armed and trained.

<sup>17</sup> Includes 1 Corporal.

<sup>18</sup> 8 Range Takers and 8 Scouts.

<sup>19</sup> Not included in total.

MACHINE GUN SECTION											
Subalterns	2					2	2			2	
Sergeants			2			2					
Corporals					2	2					
Privates					16	16					
Drivers (1st Line Transport)					5	5		10		10	
Batmen <sup>20</sup>					2	2					
TOTAL MACHINE GUN SECTION	2		2		25	29	2	10		12	

---

<sup>20</sup> Fully armed and trained.

MACHINE GUN COMPANY  
WAR ESTABLISHMENT (continued)  
COMPOSITION IN DETAIL.  
(ii) Transport.

Detail			Horses	
	Vehicles	Drivers	Draught	Heavy Draught
1st Line				
HEADQUARTERS				
Bicycles	4			
Carts – Cooks	1	1	1	
Carts – Water	1	1	2	
EACH SECTION			8	
Wagons Limbered G.S.			2	
– for 4 Machine Guns, Tripods, Ammunition & 4 Ammunition				
Pack Saddles <sup>21,22</sup>	2	4		
– for Ammunition <sup>23</sup>	1	1		
TRAIN				
Wagon, G.S., for Baggage and Supplies	1	1		2
TOTAL	19	22	43	2

---

<sup>21</sup> For lead horses.

<sup>22</sup> 7,000 rounds in each limbered wagon.

<sup>23</sup> 18,000 rounds.

### **Increase in Establishment.**

This Establishment underwent certain minor changes as a result of early experience of its working. It was soon found that a Second-in-Command was required to look after Administration, and that the number of Artificers was insufficient; the latter were increased by 2. These additions brought the Strength of the Company up to 153, 10 Officers and 143 Other Ranks.

### **Final Establishment.**

A further testing of the new Company Organization led to an increase of 34 Other Ranks, of whom 32 were Gunners, giving a final total Company Establishment of 187, composed of 10 Officers and 177 Other Ranks. This Company Establishment, which was published on April 3rd, 1917, persisted down to the reorganization of the Canadian Machine Gun Service in February, 1918.

**MACHINE GUN COMPANY.**  
(Headquarters and 4 Sections each of 4 Guns).  
WAR ESTABLISHMENT W.E. 501/87, April 3rd, 1917.

	Personnel						Horses				
	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	TOTAL	Riding	Draught	Heavy Draught	TOTAL	Bicycles
Headquarters (excluding Attached)	2	1	2	3	29	37	3	7		10	4
Attached Four Sections	8		8		2 132	2 148	4	40		44	
<b>TOTAL COMPANY</b> (excluding Attached)	10	1	10	3	161	185	7	47		54	4
<b>TOTAL COMPANY</b> (including Attached)	10	1	10	3	163	187	7	47		54	4



**MACHINE GUN COMPANY.**  
**WAR ESTABLISHMENT (continued)**  
**COMPOSITION IN DETAIL.**  
**(i) Personnel & Horses.**

	Personnel						Horses				
	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	TOTAL	Riding	Draught	Heavy Draught	TOTAL	Bicycles
HEADQUARTERS											
Major or Captain	1					1	1			1	
Captain or Lieut.	1					1	1			1	
Coy. Sergt.-Major		1				1					
Coy. Q.M. Sergeant			1			1	1			1	
Transport Sergeant			1			1					
Artificer				1		1					
Shoeing-Smith				1		1					
Saddler				1		1					
Signallers <sup>24</sup>					4	4					4
Privates <sup>25</sup>					16	16					
Drivers <sup>26</sup>					4	4		7 <sup>28</sup>		7 <sup>28</sup>	
Storemen					1	1					
Cooks					2	2					
Batmen <sup>27</sup>					2	2					
<b>TOTAL HEADQUARTERS (excluding Attached)</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>29</b>	<b>37</b>	<b>3</b>	<b>7</b>		<b>10</b>	<b>4</b>
ATTACHED											
R.A.M.C.					2	2					
Drivers A.S.C. (Train Transport)					(1)	(1)			(2)		
<b>TOTAL HEADQUARTERS (including Attached)</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>31</b>	<b>39</b>	<b>3</b>	<b>7</b>		<b>10</b>	<b>4</b>
Note:- Above Establishment includes 1 L/Sergt. And 5 L/Corporals.											
MACHINE GUN SECTION											
Subalterns	2					2	1			1	
Sergeants			2			2					
Corporals					2	2					
Privates					24	24					
Drivers (First Line Transport)					5	5		10		10	
Batmen					2	2					
<b>TOTAL MACHINE GUN SECTION</b>	<b>2</b>		<b>2</b>		<b>33</b>	<b>37</b>	<b>1</b>	<b>10</b>		<b>11</b>	

<sup>24</sup> Includes 1 Corporal.

<sup>25</sup> 8 Scouts and 8 range Takers.

<sup>26</sup> 1 Driver for spare animals.

<sup>27</sup> Fully armed and trained.

<sup>28</sup> Includes 2 spare animals.

MACHINE GUN COMPANY.  
WAR ESTABLISHMENT (continued)  
COMPOSITION IN DETAIL.  
(ii) Transport.

Detail	Vehicles	Drivers	Horses- Mules	
			Draught	Heavy Draught
HEADQUARTERS				
Bicycles for Signallers	4			
Wagons, limbered, G.S.	1	1	2	
Carts – Cooks	1	1	1	
Carts – Water	1	1	2	
Drivers for Spare Draught Horses		1	2	
EACH SECTION				
Wagons Limbered G.S.				
– for 4 Machine Guns, Tripods, Ammunition & Ammunition				
Pack Saddles <sup>29,30</sup>	2	4	8	
– for Ammunition <sup>31</sup>	1	1	2	
TRAIN				
Wagon, G.S., for Baggage and Supplies <sup>32</sup>	1	1 <sup>33</sup>		2
TOTAL	11	24	47	

Total of All Animals is 54, and 2 Attached.

<sup>29</sup> For led animals.

<sup>30</sup> 7,000 rounds in each limbered wagon.

<sup>31</sup> 18,000 rounds

<sup>32</sup> Excl. in total. Attached from Divisional Train: not properly on the Strength of M.G. Company.

<sup>33</sup> Provided from Divisional Train.

## **FORMATION OF CANADIAN MACHINE GUN COMPANIES.**

### **Authorization; Nomenclature.**

The Authority for the Mobilization of these new Machine Gun Units was contained in the Adjutant-General's letter C.B. 18/1, dated October 29th, 1915, but it was not until December, 1915, that the first Machine Gun Companies of the Canadian Corps was mobilized. Companies took their names from the Brigades to which they belonged when formed, and were officially known at first as the "1st Canadian Infantry Brigade Machine Gun Company," "2nd Canadian Infantry Brigade Machine Gun Company," etc.: but in July, 1916, this cumbersome name was shortened to read "1st Canadian Machine Gun Company," "2nd Canadian Machine Gun Company," etc., the number of the Brigade being retained.

In August, 1916, after the Fourth Division arrived in France, there were 12 Machine Gun Companies in the Canadian Corps, numbered from 1 to 12. In January, 1917, the 13th, 14th, 15th and 16th Machine Gun Companies were formed and became the Divisional Machine Gun Companies of the First, Second, Third and Fourth Canadian Divisions, respectively. The 3 Machine Gun Companies of the Fifth Division were formed in England in 1917, and went to France in March, 1918. These last 3 Companies, which were numbered the 17th, 18th and 19th, lost their identity in June, 1918, when they were merged in the 2 Motor Machine Gun Brigades.

The Mobilization of the First and Second Division Brigade Companies began in December, 1915, and by the end of June, 1916, each of the four Divisions had its 3 Machine Gun Companies complete in Personnel, Guns and Equipment.

### **Guns.**

To begin with all Companies were issued with Colt Guns, which were taken over from Infantry Battalions or supplied from Ordnance. The First, Second and Third Division Companies employed these Guns in the Line until issued with the Vickers in July, 1916. The Companies of the Fourth Division had their Colt Guns withdrawn and received Vickers Guns 3 weeks before leaving England for France.

### **Personnel.**

In all four Divisions the nucleus at least of the Personnel for the new Units came from the Machine Gun Sections of Battalions – usually the Battalion Machine Gun Officer along with a cadre of trained Machine Gunners: in the case of the Third and Fourth Divisions, the entire Battalion Machine Gun Sections were supplied to form the new Companies. Officers and men required to complete Establishments were supplied from the Machine Gun Depot, then at SHORNCLIFFE. Great difficulty was experienced in the matter of Specialists. Units generally had to train their own Signallers and Short Rein drivers, and rely for Artificers upon enlisted men of the different trades without special experience of Army requirements. Up to this time the needs of the Field in fighting men had been so excessive that Training Depots were quite unable to provide a full supply of trained Personnel for Specialist as well as fighting departments.

At this time and until the formation of the Canadian Machine Gun Corps, all Machine Gun Personnel serving with Machine Gun Companies were shown as seconded from their own units.

## **FIRST DIVISION COMPANIES.**

### **Mobilization.**

When the First Division Companies were mobilized in January, 1916, the Division was holding the Line from PLOEGSTEERT WOOD to a point about 1500 yards North of WULVERGHEM. A nucleus of trained Personnel was withdrawn from each Battalion for these Companies. This nucleus consisted in the first place of 1 Officer and 10 Other Ranks from the Battalion Machine Gun Sections, and was increased very shortly afterwards by a further draft of 10 Other Ranks from each Battalion. 16 Colt Guns per Brigade were provided from Infantry Battalions.

### **Officers.**

On January 1st, the First, Second and Third Canadian Infantry Brigade Machine Gun Companies were mobilized, the First near MONT DES CATS, the Second in the vicinity of PLOEGSTEERT and the Third near METEREN. The Units were virtually up to Strength in Personnel by March 1st. The following Officers were serving with the First Division Machine Gun Companies on that date:

1st C.M.G. Coy.

Capt. W.J.A. LALOR (O.C.)  
 Lieut. J.I. BUNDY  
 Lieut. A.W. COULTER  
 Lieut. H.E. DETCHON  
 Lieut. A.P. DOWLING  
 Lieut. S.A. GRIFFIN  
 Lieut. F. HOTRUM  
 Lieut. H.W. SCRUTON  
 Lieut. G.T. SCOT-BROWN

2nd C.M.G. Coy.

Capt. T.H. RADDALL (O.C.)  
 Lieut. F. EDGAR  
 Lieut. J.E. HETHERINGTON  
 Lieut. N.E. KITSON  
 Lieut. J.E. MATTHEWS  
 Lieut. C.G. McLEAN  
 Lieut. J.A. PTOLEMY  
 Lieut. J.L. SCLATER  
 Lieut. R.McB. STEWART  
 Lieut. B.S. WALTON

3rd C.M.G. Coy.

Capt. E.H. HOUGHTON  
 Capt. W.M. PEARCE  
 Lieut. F.M. BRESSEY  
 Lieut. L. BUCHANAN  
 Lieut. E.W. BROOKFIELD  
 Lieut. H. DONALD  
 Lieut. A. DENHOLM  
 Lieut. J. KAY  
 Lieut. H.A. KENNEDY  
 Lieut. J.M. McEACHERN  
 Lieut. G.K. MACBETH  
 Lieut. H.G. PEPALL  
 Lieut. J.S. THORPE  
 Lieut. H.M. WILSON

**Organization; Training.**

The First Division Companies were equipped and made ready for the Line in the order of their Brigades. The 1st Brigade Company spent the month of January in training feverishly to acquire a knowledge of the Colt Gun, and on the 29th, moved from MONT DES CATS to Billets at ARTILLERY FARM, near KEMMEL, and at once took over Machine Gun Emplacements on the Left Sector of the Division. The 2nd Company had the whole of January and February for Organization and Training and went into Line for its first Tour toward the end of March in the Right Sector, in the neighbourhood of LA HUTTE. Captain HOUGHTON's Company was less fortunate than the other two, as it was unable to obtain Guns for several months: the intervening time was spent doing working parties, and on Machine Gun Training in and out of the Line. At the end of March the First Division moved North, taking over the Line with its left Flank on HOOGE. The 3rd Company continued its routine in this Sector, was equipped with Transport at POPERINGHE on April 8th, and eventually on June 1st and 2nd received 16 Guns, 4 each from the 13th, 14th, 15th and 16th Infantry Battalions. On the night of 2nd/3rd June, the Company went into the Line for its first Tour, in trenches immediately South of ZILLEBEKE LAKE.

**SECOND DIVISION COMPANIES.****Organization.**

The Machine Gun Units of the Second Division were formed in the same way as those of the First Division, and at the same time.

**Officers.**

The following Officers were serving with the 4th, 5th and 6th Companies on March 1st, 1916:

4th Company

Lieut. J. EDWARDS (O.C.)  
 Lieut. J. DUNCANSON  
 Lieut. W.J. FORBES  
 Lieut. MITCHELL  
 Lieut. A.D. GRAY  
 Lieut. C.H.J. JAMES  
 Lieut. J. MESS  
 Lieut. H.J. PRICE  
 Lieut. J.G. WEIR  
 Lieut. J.F. WHITE  
 Lieut. R.W. WHITE

5th Company

Lieut. S.W. WATSON  
 Lieut. L.H. BERTRAM  
 Lieut. A.C. BOWLES  
 Lieut. F.H. DUCK  
 Lieut. C.V. GRANTHAM  
 Lieut. W.H.F. KETCHESON  
 Lieut. J.E. McCORKELL  
 Lieut. C.E.H. THOMAS

6th Company

Lieut. T.A.H. TAYLOR  
 Lieut. J. BASEVI  
 Lieut. C.L. BECK  
 Lieut. A. EASTHAM  
 Lieut. A.G.W. McLELAN  
 Lieut. G.G. WHITE

When the Companies were formed the Second Division was in the Line on the KEMMEL-VIERSTRAAT Sector.

#### **4th C.M.G. Company.**

On December 24th, 1915, a nucleus of 4 Officers and 69 Other Ranks assembled at SCHOOL FARM, near the village of LA CLYTTE, in Belgium, to form the 4th Brigade Machine Gun Company. 8 Colt Guns were drawn from the Ordnance Depot, and a few days later, part of the Transport arrived. Most of this initial Personnel came from the M.G. Section of the Infantry Units in the Brigade:-

1 Officer (B.M.G.O.)	4th Brigade Headquarters
1 Officer and 27 Other Ranks	18th Battalion
9 Other Ranks	19th Battalion
1 Officer and 22 Other Ranks	20th Battalion
1 Officer and 10 Other Ranks	21st Battalion

Lieut. J. EDWARDS, who was appointed Commanding Officer, assisted by the other officers, immediately set himself to organize, train and build up the equipment of his Command. This work was greatly interfered with, as the Company had to begin, on the same day that it assembled, to do Tours in the Line – manning a number of Gun Positions, building new Emplacements and Night Firing. In January, 6 new Officers arrived, and by the end of the month the new Unit was fairly well organized and running smoothly. In March, another 8 Colt Guns were received from the 4th Brigade Infantry Battalions and 82 Men reported from the Machine Gun Sections of the Reserve Infantry Battalions in England. March 24th, 1916, found the 4th Company up to Establishment in Personnel, Guns and Transport and fully organized.

#### **5th C.M.G. Company.**

Before the end of December, the 5th Company under Lieut. WATSON had already assembled a nucleus of its Personnel, Transport and Guns. The Personnel was supplied from the Battalions in the 5th Brigade, as follows:-

22nd Battalion	12 Other Ranks
24th Battalion	13 Other Ranks
25th Battalion	12 Other Ranks
26th Battalion	<u>12</u> Other Ranks
	<u>49</u> Other Ranks.

The nucleus Transport and 8 Colt Guns were drawn from the Horse Transport Depot and Ordnance, respectively. The Strength in Officers and Other Ranks was made up by drafts from England, and on March 15th, the remaining 8 Guns required to complete were received from Infantry Battalions. The Company was finally organized into Sections on March 20th.

On March 24th, the Company began its maiden Tour in the Line as a Company. As early as January 2nd the Unit had made itself responsible for manning 4 Gun Positions in rear of KEMMEL TRENCH during Brigade Tours, but the larger proportion of the Personnel during the months of January, February and early March were engaged in building Machine Gun Emplacements, and doing Pioneer work in the vicinity of the Line. 7 new Officers, who arrived from England on January 30th, were sent to Infantry Battalions for Trench experience.

#### **6th C.M.G. Company.**

The 6th M.G. Company was formed at KEMMEL, in December, 1915. The original Personnel and 4 Colt Guns were drawn from the 27th, 28th, 29th and 31st Infantry Battalions. Lieut. T.A.H. Taylor, of the 29th Battalion, who was given Command of the Company, was the only officer on its Nominal Roll until the end of January, 1916, when Reinforcements from England began to arrive. A new Camp was constructed on the KEMMEL-HYDE PARK Corner Road near KEMMEL Corner, and here Lieut. TAYLOR trained, equipped and organized his new Command. In March, another batch of Reinforcements arrived and on April 1st, the Company had on its Strength 10 Officers and 147 Other Ranks. 12 Colt Guns were received on April 3rd from the Infantry Battalions of the 6th Brigade and the 2nd Pioneer Battalion, this bringing up the total to 16. The early days of the 6th Company were spent in building and holding Strong Points East of the VIERSTRAAT-NEUVE EGLISE Road in support to the 6th Brigade.

### THIRD DIVISION COMPANIES.

#### Organization.

As was the case with the First and Second Divisions, the Machine Gun Companies of the Third Division were organized while the Division was holding the Line. This fact made the Mobilization of the Companies a more difficult matter than if the Brigades had been at rest. The Companies were formed in each case of Personnel, Guns and Transport withdrawn from Battalions in their own Brigades. Where necessary the Personnel was supplemented by Officers and Other ranks from the Depot in England. The Units were organized in March and April, 1916, as the 7th, 8th and 9th Canadian Infantry Brigade Machine Gun Companies. The following Officers were serving with the respective Companies on their formation:

#### 7th Company.

Capt. H.F. Cook (O.C.)  
Lieut. H.T. BEECROFT  
Lieut. C.O.C. FENTON  
Lieut. F.A. HALE  
Lieut. G.T. SCROGGIE  
Lieut. W.F. TOBEY  
Lieut. W.G. WILLIAMS  
Lieut. E.H. ZIEGLER

#### 8th Company.

Capt. W.M. BALFOUR  
Capt. S.J. REDPATH  
Lieut. P.W. BEATTY  
Lieut. C.N. BENNETT  
Lieut. J.R. COULL  
Lieut. W.C. INCE  
Lieut. C.W. LAUBACH  
Lieut. W.N. MOORHOUSE  
Lieut. H.J.G. MORGAN  
Lieut. F.A. NEY  
Lieut. A.W. SIME  
Lieut. H.C. YOUNG

#### 9th Company.

Capt. W.H. BOTHWELL  
Lieut. H.D. BROWNE  
Lieut. G.W. BERESFORD  
Lieut. R.C. CORDINGLEY  
Lieut. K. EAGER  
Lieut. I. MacKINNON  
Lieut. E.I.H. INGS  
Lieut. L.S. PAGE  
Lieut. G. RUTHERFORD  
Lieut. R.A. WHITAKER

All three Commanding Officers had served in the capacity of Brigade Machine Gun Officer in their respective Brigades prior to the formation of the Companies. On April 28th, Captain BOTHWELL, evacuated sick, was succeeded by Lieut. IAN MacKINNON in the Command of the 9th Company.

#### **7th C.M.G. Company.**

Orders for the Mobilization of the 7th Company were published on March 3rd, but it was not until late in April that the men assembled. The Brigade was in the Line and the Personnel selected for Transfer to the Machine Gun Company remained with the Battalions until the Tour was completed, 7 Officers who arrived from England on April 3rd, were attached to various Infantry Battalions pending the Mobilization of the Company. On April 24th, 4 Colt Guns with Transport were received from the 49th Battalion, and the attached Officers returned from Battalions. On the 28th, the remaining 12 Guns were handed over, viz., 4 Colt Guns from R.C.R., 4 from the 42nd and 4 Vickers Guns from the P.P.C.L.I. Meantime the Personnel had assembled in huts at the Machine Gun Camp "B," S.W. of BRANDHOEK, and about 1 mile due East of POPERINGHE. On the day the last of their Guns were received, they relieved the 8th Brigade Company in the Right Sector of the Divisional Front, ZILLEBEKE-MAPLE COPSE-SANCTUARY WOOD.

#### **8th C.M.G. Company.**

Captain BALFOUR's Company was authorized on April 1st. The 8th Brigade had been relieved by the 7th brigade and the Machine Gunners for the new Unit were got together at once into a Camp of their own. The Machine Gun Sections of the 1st, 2nd, 4th and 5th C.M.R. Battalions formed the initial Strength of the Company. After a fortnight's Training the 8th Company relieved Machine Guns of the 7th Brigade in the ZILLEBEKE-MAPLE COPSE-SANCTUARY WOOD Sector for their first Line experience as a Company.

#### **9th C.M.G. Company.**

The 9th Company were more fortunate in the circumstances of their Organization. The Brigade had just arrived from ENGLAND when the Machine Gun Companies were authorized so that it was found possible to collect the Personnel for the new Unit at once. The men selected for transfer from the 43rd, 52nd, 58th and 60th Battalions were assembled in a Camp near WISQUES. Captain BOTHWELL assumed Command when the Unit was formed on April 15th, and after a short period of Training the Company took up positions in the Left or HOOGE Sector of the Line about April 22nd.

## FOURTH DIVISION COMPANIES.

### Organization.

The Fourth Division was gradually built up during the Summer of 1916 at BRAMSHOTT CAMP, Hampshire, from Battalions some of which had been in England for a considerable time, others of which joined the Division direct from Canada. In the first week of June the Brigade Machine Gun Companies, numbered 10th, 11th and 12th, were mobilized, the Personnel being composed of Battalion Machine Gun Sections with additional Officers and a very small number of Other Ranks from the SHORNCLIFFE Depot. The following Battalions supplied their Machine Gun Sections and Colt Guns to form the Machine Gun Units of their respective Brigades:

<u>10th M.G. Company.</u>	<u>11th M.G. Company.</u>	<u>12th M.G. Company.</u>
44th Battalion	53rd Battalion	51st Battalion
46th Battalion	54th Battalion	72nd Battalion
46th Battalion	74th Battalion	73rd Battalion
50th Battalion	75th Battalion	87th Battalion

The above Infantry Units were grouped under the Fourth Division when the Machine Gun Companies were mobilized.

### Officers.

The undermentioned Officers were taken on Strength and went to France with these Companies.

<u>10th M.G. Company.</u>	<u>11th M.G. Company.</u>	<u>12th M.G. Company.</u>
Capt. J. MESS (O.C.)	Capt. B.M. CLERK (O.C.)	Capt. H.E. HODGE (O.C.)
Lieut. C.T. BOWRING (2nd i/c)	Lieut. H. WARD (2nd i/c)	Lieut. L.F. PEARCE (2nd i/c)
Lieut. H.A. FOWLER	Lieut. F.E. BOULTBEE	Lieut. F.R. ALFORD
Lieut. C.U. HEBDEN	Lieut. F. BULLOCK-WEBSTER	Lieut. C.C. DREW
Lieut. A.E. LADLER	Lieut. H.J. BURDEN	Lieut. I.C. HALL
Lieut. G. SAGE	Lieut. K.W. JUNOR	Lieut. H.E. HENDERSON
Lieut. C.W. SMITH	Lieut. T.F. MURRAY	Lieut. H.T. LOGAN
Lieut. C.F. THOMPSON	Lieut. E.W. SANSOM	Lieut. H.A. PEVERLEY
Lieut. K. WEAVER	Lieut. A.G. SCOTT	Lieut. J.A. RIDDELL
Lieut. H.S. WHITESIDE	Lieut. C.W. STROUD	Lieut. W.G. WILLIAMS

### Training.

The Personnel was got together under canvas in each Brigade area of the Camp, and Organization was proceeded with, an easy matter compared with the task of the Companies of the other 3 Divisions mobilized in the Field. The month of June and most of July was spent in Organization and Training, and in gaining some knowledge of the Colt Gun. Toward the end of July this weapon was withdrawn and an issue made of Vickers Guns. The next 3 weeks were spent in intensive Instruction in the new Gun and in range practices, the latter carried out at LONGMOOR Ranges, where a camp was occupied for the purpose. The arrangements for Training and Range Firing were made by Captain BASIL FOSTER, who with a small Staff of Sergeant Instructors, was sent from the ALDERSHOT Machine Gun School to Instruct the Fourth Division Machine Gun Units in the Vickers Gun.

This Training went on right up to the time of leaving for France.

### Arrival in France.

The 10th Company crossed to LE HAVRE on August 10th, 1916, the 11th on August 11th, and the 12th on the 12th. The Fourth Division relieved the Second Division on the 24th/25th August; the 10th and the 11th Machine Gun Companies relieved their opposite numbers, the 4th and 5th Companies, for the first Line experience. The 12th Company carried on with Machine Gun Training for a fortnight, when it relieved the 56th and 58th Machine Gun Companies of the Nineteenth Division East of KEMMEL.

### Advantage of Company Organization.

The formation of Machine Gun Companies was a great gain for Machine Gunnery. It had been realized for many years and particularly since the commencement of the War that, although the Machine Gun was

an Infantry weapon and possessed the fine effect of the Infantry Rifle, it had a power peculiar to itself and not very unlike that of the Artillery. This power was due to its special characteristics; its Fixed Platform with the derivative advantages of Overhead Fire, Indirect Fire and Surprise Effect; its ability to deliver and apply from a Narrow Front and Shallow Depth a Volume of Rapid and Accurate Fire; its all-round Traverse; its Invulnerability; etc. Unless a special study of these characteristics were made, the principles underlying the employment of the Weapon in the Field could not be understood, and such study was impossible as long as the weapon remained in the hands of Infantry Units. The early experience of this War clearly indicated to close students of the subject, that the Machine Gun was a separate Arm of the Service, with tactics of its own, intermediate between those of the Infantry and the Artillery. The organization of all the Machine Guns of an Infantry Brigade into one complete tactical and administrative Unit was a step up the road of progress and made possible the development of the Machine Gun along its own special lines.

This aspect of the new Organization is, of course, secondary and derivative. The primary and actuating motive no doubt in the formation of Machine Gun Companies was the gradually acquired certainty of the power of the Machine Gun as an offensive and defensive weapon, in close co-operation with Infantry; and so, the number of guns was multiplied. The form which the new Company Organization took, as has been pointed out, was the result, in large measure, of experience in methods of controlling the Battalion Machine Guns of a Brigade through a Brigade Machine Gun Officer.

### **Control and Training.**

The advantages or gains from the new Company Organization were mainly two, viz: a centralized Control and uniformity of Training. Hitherto the Machine Guns, though supervised by the B.M.G.O. were trained with and administered by their own Battalions. The B.M.G.O. was deputed by the Brigadier to issue Orders for the Machine Guns of the Battalions; but the difficulties of Communication and Command when dealing with 4 widely scattered Units, and that too, without real authority over them, were very apparent. It was a great gain, therefore, when Machine Guns were brought together under a Company Commander, and provided with their own Transport and means of Communication. The wishes of the Brigadier regarding the disposition and action of Machine Guns could now be more readily carried out. The problem of Command was not settled definitely at this time but a step was taken in the direction of its settlement.

The gain in uniformity of Training throughout a Brigade was very marked and definite. When the Brigade Machine Guns were withdrawn from the Line a uniform Syllabus of Training could be carried out by the whole Company, under the direct supervision of the Company Commander; the latter had his own Officers and N.C.O.'s under his own undivided Command; whereas hitherto, in periods out of the Line, Training was carried out by Battalions billeted often far apart and under conditions which made any central supervision very difficult.

### **Esprit de Corps.**

The grouping of the Machine Gun Personnel into Companies had also with it a subtler intangible advantage. The creation in each Brigade of a Machine Gun Unit with its own separate life, building up its own traditions, solving its own problems, could not but give an impetus to the development of this new arm of the Service.

Under this Company Organization the fighting of 1916 and most of 1917 was done, including ST. ELOI, the June, 1916, battles, the SOMME, VIMY RIDGE, ARLEUX and FRESNOY, and HILL 70.

## **V.**

### **APPOINTMENT OF CORPS AND DIVISIONAL MACHINE GUN OFFICERS.**

#### **CANADIAN CORPS MACHINE GUN OFFICER – APPOINTED, OCTOBER 28TH, 1916.**

##### **Appointment.**

The next step in chronological order in the Machine Gun Organization was the appointment of a Corps Machine Gun Officer (C.M.G.O.). The Adjutant General's letter No. A/16505, dated October 30th, 1916, authorized the appointment of a Machine Gun Officer at each Corps Headquarters of the British Army and on November 2nd, Lieut.-Colonel R. BRUTINEL, D.S.O., Commanding the 1st C.M.M.G. Brigade was chosen for this office in the Canadian Corps, his appointment dating from October 28th, 1916.



In the Canadian Corps the functioning of a C.M.G.O. was not entirely new. For some months prior to his appointment as C.M.G.O., Lieut.-Colonel BRUTINEL had been in command on successive occasions of large concentrations of Machine Guns; during our operations on the SOMME, from mid-September, 1916, he had co-ordinated, for Barrage purposes, groups of Guns from the 1st C.M.M.G. Brigade, and from the First, Second, Third and Fourth Divisions for their successive Operations on that Battle Field. But the office was new and the appointment of Lieut.-Colonel BRUTINEL ensured that it would at once possess life and vigour.

#### **Duties of C.M.G.O.**

The duties of the C.M.G.O. were outlined in Canadian Corps letter making the appointment, and were stated as follows:-

- A. To assist Divisional and Brigade Commanders when required in matters connected with Machine Guns and their employment in offensive and defensive Operations.
- B. To assist in the tactical training of Machine Gun Companies out of the line; to inspect Machine Gun Companies in the Line.
- C. To ensure that a sound doctrine regarding the principles of handling Machine Guns is spread throughout the Infantry by means of lectures for Officers of Machine Gun Companies at Corps or Divisional Schools of instruction.
- D. To watch on behalf of the Corps Commander the special interests of the Machine Gun Corps Personnel as regards promotion and appointment. (Auth. O.B./407 dated September 26, 1916).
- E. In the event of operations the C.M.G.O. will exercise executive command over such Machine Gun Units of the Corps as may be placed under his orders by the Corps Commander for this purpose.

#### **Canadian Corps M.G.O.'s Task.**

From the outset Colonel BRUTINEL laboured unceasingly under the Corps Commander, to complete the Machine Gun Organization of the Canadian Corps and to pilot Machine Gunnery into its proper Channel. The object aimed at on the side of Organization was, starting with the disconnected Infantry and Motor Machine Gun Units then existing, to create, within the Canadian Corps, a Machine Gun Corps of intelligent, highly trained, and disciplined men. On the administrative and tactical side Colonel BRUTINEL set himself to gain, for Machine Guns, complete independence of action and so make it possible for them to find their true "metier." Both these aspirations were achieved within eighteen months of his assumption of office.

The Canadian Machine Gun Corps was authorized on April 16th, 1917, and on April 30th, 1918, was published Canadian Corps letter G.126/3-6, stating that "there is no similarity between Infantry Battalions and Machine Gun Battalions, either as regards administration or tactics," and that "the Machine Gun Service must be regarded as a distinctive Arm with Tactics of its own."<sup>34</sup>

#### **Progress in Barrage Fire.**

It was from the time of Colonel BRUTINEL's appointment that the Machine Gun Service of the Corps began to show that independence of effort and initiative which became one of its most striking characteristics. Indirect Barrage Fire for Machine Guns was employed on a large scale for the first time in History under Colonel BRUTINEL's direction during the SOMME fighting. Immediately after this Battle the Canadian Corps was requested to send copies of its Machine Gun Instructions and Operation Orders to all the other Corps in France. From the time of the VIMY RIDGE Operation the Canadian Machine Gun Corps was regarded throughout the British Army as the leader in this Branch of Machine Gun Science, and a number of British M.G.O.'s were sent to Canadian Corps Headquarters to study Indirect Fire Methods.

---

<sup>34</sup> See Page 165.

### **Development of Organization.**

From this period, too, in the matter of Organization, the evolution of forms and Establishments in the Canadian Machine Gun Corps always seemed to be a stage in advance of parallel developments in the British Machine Gun Corps. The most notable example of this is the Machine Gun Battalion Establishment first authorized for the Canadian Corps in February, 1918: at the time of the Armistice the general form of this Organization was under consideration for adoption by the British Machine Gun Corps.

The complete success of the later Organization of the Canadian Machine Gun Corps was, to a very large extent, due to the forethought, energy and determination of General BRUTINEL.

### **DIVISIONAL MACHINE GUN OFFICERS – APPOINTED, DECEMBER 1ST, 1916.**

#### **Need of D.M.G.O.**

The institution of the C.M.G.O.'s office left a very wide gap between the Machine Gun Officer at Corps and the Machine Gun Company Commander whose work it was the C.M.G.O.'s duty to supervise, and with whom he had to co-operate in tactical and administrative matters. It was obviously an impossibility for an Officer whose duties kept him at Corps Headquarters to maintain a close relationship with Officers so widely separated from him and from one another as the Commanders of Machine Gun Companies. Moreover, within Divisions themselves, the feeling was growing that some means should be devised of securing among the three Brigade Machine Gun Companies a measure of uniformity in Training, Efficiency and Discipline.

#### **Provisional Office.**

This need of an Officer mid-way between the C.M.G.O. and the Officers Commanding Companies led to the provisional appointment in the 4 Divisions of Divisional Machine Gun Officers, (D.M.G.O.) to serve as a link between the Machine Gun Units in Divisions and the C.M.G.O., and to assist Divisional and Brigade Commanders in correlating Machine Gun work within each Division. These appointments were made on December 1st, 1916.

#### **Duties.**

The duties of this office were set forth as follows in the Canadian Corps letter which established it<sup>35</sup>:-

- A. To assist Divisional and Brigade Commanders in co-ordinating the organization, training and tactical employment of all Machine Guns in the Division.
- B. To assist the Corps Machine Gun Officer in all matter concerning Machine Gun training and Organization in the Division.
- C. To inspect Machine Gun Detachments in the Line, and to report to the Divisional Commander as regards, discipline, alertness, knowledge of duties and all matters affecting efficiency of the Machine Guns in the Line.
- D. To assist in the training of the Machine Gun Companies out of the Line with a view to ensuring uniformity of principles and training throughout the Machine Gun Units in the Division.
- E. To assist the Machine Gun Company Commanders in all matters appertaining to the Machine Gun Service.

#### **Appointment.**

The undermentioned Officers were appointed D.M.G.O.'s at this time:-

1st Division	Major W.J.A. LALOR, M.C.
2nd Division	Major W.D.B. GOODFELLOW, M.C.
3rd Division	Major W.M. BALFOUR, D.S.O.
4th Division	Capt. H.F.V. MEURLING, M.C.

---

<sup>35</sup> C.C. G.874, d/28-11-16.

These provisional appointments were made pending the official sanction from the War Office, which appeared in 1917. Before the Authority came, several Corps beside the Canadian Corps, had found it impossible to obtain the best results from the Machine Gun without the help of a Divisional Officer, and had accordingly made provisional D.M.G.O.'s.

#### **D.M.G.O.'s Function.**

The D.M.G.O. had no authority of command. In relation to the General Officers Commanding the Division and its Brigades, he was in a position very similar to that of the B.M.G.O. in relation to the G.O.C. Brigade and the Officers Commanding its Battalions. He advised and supervised: he had no Command.

#### **Appointment Justified.**

The appointments in the different Divisions came at a time of more than ordinary strain, when preparations were being made for the capture of VIMY RIDGE, and during this strenuous period as well as in the subsequent Operations the office more than justified itself. The functions of the D.M.G.O. became of more and more importance on account of the rapid development in Machine Gun Fire Tactics, and as a result of the increase in Machine Gun Strength by the addition of a 4th Company in each Division. The appointment was continued therefore until the formation of Divisional Machine Gun "Battalions" on August 3rd, 1917, when the D.M.G.O.'s place was taken by the Divisional Machine Gun Commander (D.M.G.C.).

## VI.

### REINFORCEMENTS AND INSTRUCTION: 1914-1916.

#### SUPPLY OF REINFORCEMENTS.

##### Early Reinforcements.

Prior to the formation of a Canadian Machine Gun Reinforcement Depot in England the demands for Machine Gunners for France were made up from the Infantry Reserve Battalions. The Personnel of Officers and Other Ranks so drawn were trained (a) in Captain Johnston's School, at Ross Barracks, for Officers and N.C.O.s, (b) in the Reserve Battalions themselves, (c) in the "Canadian Machine Gun School," under Major T.C. BAMFIELD, at Napier Barracks, and (d) in the "Brigade Machine Gun Bases." These reinforcing arrangements continued for some months after the formation of Brigade Machine Gun Companies in the Field.

##### Formation of Canadian M.G. Depot.

In May, 1916, the 86th Canadian (Machine Gun) Battalion arrived in England. This Battalion, raised in Ontario, with Headquarters at Hamilton, had been recruited and trained as a Machine Gun Unit. At the time of its arrival in England the needs for Machine Gun Personnel for France had outstripped the available supplies in England. It was decided by the Canadian Authorities, in view of this situation, to use the 86th Battalion to supply wastage in the Field, and accordingly a Machine Gun Reinforcement and Training Depot was formed, composed of the 86th Battalion and the Canadian Machine Gun School, amalgamated with it. Lieut.-Colonel W.W. STEWART, Officer Commanding the 86th Battalion, assumed Command of the Depot, which was accommodated in Risborough Barracks, and part of Napier Barracks. In the Autumn of 1916, the Depot was moved from the SHORNCLIFFE Area to CROWBOROUGH and eventually, in the Spring of 1917, from CROWBOROUGH to SEAFORD, where it remained till the end of the War.

##### Establishment.

An Establishment for the Depot was drawn up in December, 1916, and approved as from January 4th, 1917.<sup>36</sup> But so far no definite number of Reinforcements to be maintained was fixed upon, in relation to the requirement in the Field.

##### Reorganization.

In February, 1917, the Machine Gun Depot was reorganized. Lieut.-Colonel W.M. BALFOUR, D.S.O., D.M.G.O., 3rd Canadian Division, became Commandant at this time and supervised the reorganization.

##### Scale of Reinforcements.

Provision was made for the Supply and Training of Reinforcements on the basis of the following monthly requirements:-

	Officers	Other Ranks
Infantry Branch	25	281
Motor Branch	3	40
Cavalry Branch	<u>2</u>	<u>20</u>
	<u>30</u>	<u>341</u>

These were the numbers of Reinforcements considered necessary at the time. They were calculated on the same basis as the requirements of the British Machine Gun Corps, viz., 15% of Officers and 10% of Other Ranks on the Strengths of Units in the Field to be reinforced.

---

<sup>36</sup> A.G. Canadians 43-3-15 and No. 150 H.Q. Cdns. Dated January 4th, 1917.

### **Training.**

Arrangements were made at this time for a certain number of the Officer and Other Ranks Personnel of the Depot to receive Machine Gun Training at the British Machine Gun Centre, GRANTHAM, this Training to supplement that carried on at the Depot in the ordinary course.

### **Administration.**

When the Canadian Machine Gun Corps was formed in April, 1917, the Machine Gun Depot was mentioned in its constitution as one of the Establishments to be maintained in the Machine Gun Corps: in practice the Depot at SEAFORD was administered by the Canadian Military Authorities in England.

## **MACHINE GUN INSTRUCTION.**

It is convenient at this point to consider, shortly, the Machine Gun Instructional Work done in the Canadian Overseas Forces up to this time.

The 1st C.M.M.G. Brigade have the distinction of conducting the first M.G. Course in England for Members of the Canadian Expeditionary Force after proceeding Overseas. The First Canadian Division Daily Orders, issued by Lieut.-General ALDERSON, for December 9th, 1914, contain the following paragraph, giving instructions for the Assembly of this Course:-

“Machine Gun Course 474”

“A Course of Instruction in the Mechanism of the Colt Automatic Machine Gun under the Superintendence of the O.C. Auto Machine Gun Brigade has been arranged to commence on Monday, December, 14th. The Course will conclude at 12 Noon on December 19th.

“Officers Commanding Infantry Brigades will forward early the names of 1 Officer and 1 N.C.O. selected from each Battalion of their Brigades to attend this Course.

“Those selected should be those who will be responsible for the Training of M.G. Sections.

“Tents will be provided for Officers, N.C.O.’s and Officers’ Servants at BUSTARD CAMP, where arrangements will be made for meeting.

“Officers and N.C.O.’s attending the Course should report to Major Brutinel, Commanding the Auto Machine Gun Brigade, at 7.000 A.M., December 14th, at his camp.”

A further Order regarding this First Course was published on December 13th, as follows:-

“540”

“With reference to Divisional Order No. 474, dated 9th instant, Battalions will arrange to send their Machine Guns and Tools to the Camp of the Auto Machine Gun Brigade by 9.00 A.M. on Monday, December 14th.

“A Camp for those attending the Course is being pitched near that of the Auto M.G. Brigade to whom N.C.O.’s and Officers’ Servants will be attached for rations. Major Brutinel has kindly arranged for the Officers of the 2nd, 3rd and 4th Infantry Brigades attending the Course to use the Mess of the Auto Machine Gun Brigade.”

### **Subjects Taught.**

The Instruction given consisted of Elementary Training in the Parts and Mechanism of the Colt Gun, Stripping, and Assembling the Gun, and Firing on the Ranges. Major BRUTINEL gave a number of lectures on Fire Tactics.

### **Colt Gun Handbook.**

This Course was untended to assist Battalions to train their own Machine Gun Sections. In order to make uniform the Instruction throughout the various Units of the “Contingent,” a book was published under Major BRUTINEL’s direction, called the “Provisional Handbook of the Colt Automatic Gun, First Contingent, Canadian Expeditionary forces,” containing the detail for Elementary Machine Gun Instruction in the Colt Gun.

### **Early M.G. Training in France.**

Machine Gun Instruction in the First Division was continued by the 1st C.M.M.G. Brigade in France. In July and August, 1915, a 3-weeks Machine Gun Course was given under Lieut.-Colonel BRUTINEL's supervision for Machine Gunners of the First Division. The Course was given at LA BOURSE (near BAILLEUL), where the Rest Billets of the M.M.G. Brigade were situated; and was attended by 15 Officers, 15 N.C.Os. and 50 Men of the First Division. At the same place 3 seven-day Machine Gun Courses were given, under direction of the 1st M.M.G. Brigade for Officers, N.C.Os. and Men of the 3rd Infantry Brigade. These were the first Machine Gun Courses given in France to the Personnel of the Canadian Forces.

### **Indirect and Harassing Fire.**

The Instruction given in these Schools consisted of Elementary Machine Gun Training and Range Practices. In the Autumn of 1915, a system of Indirect Fire was applied by Officers of the M.M.G. Brigade. Indirect Fire was first used in a definite Operation in the Canadian Forces on the night of 24th/25th September, 1915. On this and the following night our Artillery sought to create a diversion on the flank of a British Attack at LOOS, and 16 Guns of the 1st M.M.G. Brigade co-operated by firing on Enemy Communications Trenches, and other suitable targets. By this time the Officers and the N.C.Os. of the M.M.G. Brigade had acquired some knowledge of Indirect Fire Theory, and Indirect Harassing Fire now became a feature of the Canadian Machine Gunner's Trench Routine.

Meantime, while Machine Gunners had been solving Instructional problems in France, there were Instructional developments in England which had an important influence upon Machine Gun Operations in the Field.

### **M.G. Training in Reserve Infantry Battalions.**

After the departure of the First Division for France the Units left behind were moved from SALISBURY PLAIN to the SHORNCLIFFE Area. The Reserve Battalions were issued with one and, in some cases, two Colt Guns for Instructional use. The 11th Reserve Battalion, which supplied Reinforcements for the P.P.C.L.I., then Brigaded with a British Unit, was issued with one Vickers Gun. It was intended that the various Reserve Battalions should train sufficient Personnel to replace casualties incurred by Machine Gun Sections of the Battalions they were reinforcing in the Field, but great difficulty was experienced in accomplishing this Training owing to the lack of Instructors. At the time there was no School for the Training of Machine Gun Instructors.

### **Captain JOHNSTON's School.**

This need was provided for in April, 1915, when Captain D.J. JOHNSTON, 1st Battalion the Queen's Own (Royal West Kent Regiment), was loaned by the War Office to instruct Canadian Officers and N.C.Os. in Machine Gun Work. Captain JOHNSTON, with the assistance of the "Provisional Handbook of the Colt Automatic Gun," previously prepared by the 1st C.M.M.G. Brigade, got together and had published a "Handbook of the Colt Gun."

Classes were held in Ross Barracks and consisted of from 12 to 15 Officers and the same number of N.C.Os. drawn from the various Training Battalions in the Area. The Courses lasted for 2 two weeks and included Instruction in Gun Drill, Mechanism, Stoppages, Night Firing, Indirect and Overhead Fire, and Machine Gun Tactics. The 1st Class assembled at Ross Barracks, SHORNCLIFFE, on April 12th, 1915.

These Course did much to improve the standard of Machine Gun Training in Reserve Units, and also provided a supply of Trained Machine Gun Officers and N.C.O. Reinforcements in the 1st Division Battalion in France.

### **Formation of Colt Machine Gun School.**

But this school was found to be inadequate for the requirements of Training. When the Instruction of Personnel was left to the Machine Gun Officers and N.C.Os. of Reserve Units there was an inevitable lack of uniformity in Training: this went to indicate that the supply and Training of Machine Gunners should be controlled, not by individual Reinforcing Battalions, but by the Headquarters of the Training Division.

On June 10th, 1915, therefore, a Central School for Other Ranks called the "Colt Machine Gun School" was opened at Napier Barracks, SHORNCLIFFE. The School was under the Command of Captain T.O. BAMFIELD, assisted by Lieut. F.B. McRAE, Lieut. E.W. SANSON and 10 N.C.O. Instructors drawn

from the various Units of the Training Division. The Other Ranks attending were quartered in Risborough Barracks with the Canadian Military School.

### **Courses.**

The first Colt Machine Gun Course, which lasted 3 weeks, turned out about 50 Machine Gunners. The Classes increased in size as more Guns became available, and the Instructional Staff and attendance grew until 500 thoroughly trained Gunners were produced every week.

### **The Canadian M.G. School.**

In September, 1915, Captain JOHNSTON's School was absorbed into the Colt Machine Gun School, which now became a Wing of the Canadian Military School for Administration, Quarters and Discipline, and was re-named "The Canadian Machine Gun School."

### **Subjects Taught.**

The Instruction given consisted up to this time entirely of Elementary Training and Range Practices. On completion of Range Work all candidates were classified as 1st, 2nd or 3rd Class Gunners.

### **Indirect Fire Instruction.**

In the Autumn of 1915, Captain BAMFIELD went to France for a fortnight, where he was attached to the 1st C.M.M.G. Brigade. He found them already using Indirect Fire, and, having studied their methods, he brought back detailed information about them. This information created an intense interest among the Officers of the Machine Gun School and Lieut. H.F.V. MEURLING was detailed to take charge of the material and develop it along Instructional lines.

Lieut. MEURLING worked on these Indirect Fire methods and prepared a Course of Lectures. These Lectures were first given in January, 1916, to a class consisting of the Officers and N.C.O.s of the Eaton M.M.G. Battery and the N.C.O.s of the Boyle M.G. Detachment then attached to the Eaton M.M.G. Battery.

In this way the Employment of Indirect Fire, which began in the 1st Motor M.G. Brigade in France, came to be studied and taught to Officers and N.C.O.s in the Canadian Machine Gun School in England, and when the Brigade Machine Gun Companies were formed early in the Winter of 1915-16, Indirect Fire was regularly used as a part of normal Trench Routine.

### **Brigade M.G. Bases.**

The Formation of Brigade Machine Gun Companies created such additional demands for Trained Reinforcements that the Machine Gun School was unable to supply them. Accordingly, Machine Gun Schools, called "Brigade Machine Gun Bases," were formed by each Training Brigade in the SHORNCLIFFE Area. Here a 2 or 3 weeks' Course in Elementary Training was given, and those who successfully passed the Elementary Tests were sent to the Machine Gun School at Napier and Risborough Barracks, where their Machine Gun Training was completed and Long Range Firing carried out.

### **Canadian M.G. Depot.**

In the Summer of 1916, the Canadian Machine Gun School was amalgamated with the 86th (Machine Gun) Battalion to form the Canadian Machine Gun Depot. Major BAMFIELD became Chief Instructor of the Depot and continued to supervise its Instructional Work, until he proceeded to France in the Summer of 1917, to take Command of the Machine Gun reinforcement Depot at DIVION. Prior to February, 1917, over 7,000 Officers and Men received Machine Gun Training in the Colt Machine Gun School, the Canadian Machine Gun School, and the Machine Gun Depot.

### **British M.G. School.**

During this period (1915-1916) selected Canadian Machine Gun Officers, N.C.O.s and Other Ranks attended Machine Gun Courses conducted by the British Authorities, in France at WISQUES (near ST. OMER), and later at the G.H.Q. Small Arms School, CAMIERS, and in England at the Machine Gun Training Centre, GRANTHAM. There was as yet no Canadian Corps Machine Gun School in the Field.

## **VII.**

### **INCREASE OF MACHINE GUN STRENGTH; SPECIAL INSTRUCTION. JANUARY to MARCH, 1917.**

#### **FORMATION OF DIVISIONAL MACHINE GUN COMPANIES.**

##### **Reasons.**

During 1916, the first year of their existence, Machine Gun Companies were put to a severe test by the long periods of Trench Warfare and the heavy fighting on the SOMME. As a result of experience gained it was decided to form in each Division a fourth or Divisional Company, to supplement the Machine Gun Strength which had been found insufficient. The Strength of Gun Crews, under the Company Establishment, did not admit of Reliefs being carried out within Companies themselves: and so the whole Machine Gun Strength of a Company was required to be in the Line during the entire Tour of a Brigade, a fact which proved a severe strain upon the physical powers of Machine Gunners and consequently tended to impair efficiency. The Divisional Companies were formed to relieve this situation as well as to provide a Divisional Reserve of Machine Guns.

The new Companies of the 4 Canadian Divisions assembled at FLORINGHEM, near PERNES-EN-ARTOIS, and began training on January 18th, 1917, under the supervision of Major W.M. BALFOUR, D.S.O. The Companies were numbered 13th, 14th, 15th and 16th, the 13th being the First Divisional Company, the 14th the Second Divisional Company, etc.

##### **Personnel.**

The Personnel of Officers and Other Ranks were drawn from three sources; (1) the existing Machine Gun Companies, (2) Infantry Battalions in the Field, and (3) the Canadian Machine Gun Depot newly established at SEAFORD. A certain number of Other Ranks ear-marked for Commissions in the new Units were transferred from Machine Gun Companies and Infantry Battalions, while those drawn from SEAFORD were chiefly Specialists and Officers required to complete Establishments.

##### **Training.**

Some Training had already been done in their Divisional Areas when the new Companies gathered at FLORINGHEM. Here training was carried out under special arrangements made by the C.M.G.O. A temporary Unit was formed, known as the Canadian Corps School, Machine Gun Branch, and the following Staff were appointed:-

Commandant	Major W.M. BALFOUR, D.S.O.
Chief Instructor	Captain W.N. MOORHOUSE
Adjutant	Lieut. H.T. LOGAN
Quartermaster	Lieut. J.C. HARTLEY.

Instructors in the School were composed of Officers and N.C.O.s transferred from Machine Gun Units, and of Other Ranks loaned for the purpose by the 1st C.M.M.G. Brigade. The 1st C.M.M.G. Brigade also supplied Guns for instructional use until Machine Guns were available from Army Ordnance.

Training on the Gun and in Range Practices was continued for six weeks. Special classes were conducted for newly transferred Infantry Officers and Candidates for Commissions. The class for Officers was conducted by the late Lieut. C.J. FRENCH, M.C. The entire course was carried on under the C.M.G.O.'s supervision.

##### **Officers.**

While in FLORINGHEM the Companies completed their organization and Establishment in Personnel, Equipment, and Transport, and proceeded to join their respective Divisions in the last week of February. The following Officers were serving in the Divisional Companies on March 1st, 1918:-

13th C.M.G. Coy.

14th C.M.G. Coy.



Officer Commanding:	Lieut. J. KAY	Lieut. J. BASEVI
2nd in Command:	Lieut. A. DENHOLM	Lieut. G.N. DOUGLAS
	Lieut. G.W.N. DAY	Lieut. P.J. BULLOCK
	Lieut. G.H. DUNBAR	Lieut. T. DICK
	Lieut. J. MAITLAND	Lieut. T.F. O'FLAHERTY
	Lieut. D.A. McINTOSH	Lieut. W.C. THOMPSON
	Lieut. C.G. McLEAN	Lieut. J. TURNER
	Lieut. A. McKENZIE	Lieut. L.F. WHITE
	15th C.M.G. Coy.	16th C.M.G. Coy.
Officer Commanding:	Capt. W.N. MOORHOUSE	Lieut. E.W. SANSOM
	Lieut. J.C. HARTLEY	Lieut. H.T. LOGAN
	Lieut. F.McK. GARRISON	Lieut. L. GAVREAU
	Lieut. C.E. GARNEAU	Lieut. S. JOHNSTON
	Lieut. W.J. HUTCHENS	Lieut. B.C. MONTAGNON
	Lieut. J.R. McLEAN	Lieut. E.L. RAINBOTH
	Lieut. P.C. MULHOLLAND	Lieut. A. RITCHIE
		Lieut. W.H. WATSON

### **Special Advantages of Increase.**

It was a fortunate coincidence that the new organization came just at the time of the introduction of Machine Gun Barrage Fire into the Corps on a large scale: for in each Division there were now available for Barrage purposes a proportion of these 16 Guns. In addition to those available for special Operations from the existing Machine Gun Companies with Brigades. When the Divisional Companies completed their Training preparations were already well advanced for the VIMY RIDGE Operation and this Battle was actually the initial engagement in which the New Units took part.

### **CANADIAN MACHINE GUN SCHOOL FOR OFFICERS.**

#### **Object of School.**

While the Divisional Machine Gun Companies were undergoing Training at FLORINGHEM, a Machine Gun School was in progress at the village of PERNES close by. The object of this School, which was formed temporarily for this purpose, was to give the Officers of the Canadian Machine Gun Companies Special Training in Indirect Fire and subsidiary subjects. The plans for the capture of VIMY RIDGE involved the intensive employment of Barrage Fire in the Attack itself and of Indirect Harassing Fire in Preparatory Stages, and it was the desire of the Corps Machine Gun Officer to make his Units as proficient as possible in this new form of Machine Gun Fire: at this period there was a lack of instruction in the Schools in this Branch of Machine Gun Work.

#### **Staff.**

The Staff was composed of Major M.A. SCOTT, and Lieut. M.R. LEVEY, both of the 1st C.M.M.G. Brigade. Special lectures were also delivered by Lieut.-Colonel R. BRUTINEL. Classes consisted of 1 Officer from each Machine Gun Unit in the Corps. Each Course lasted 8 days.

#### **Syllabus.**

The following is a specimen Syllabus:-

<u>First Day:</u>	9.30 – 10.00 A.M.	Opening Address.
	10.00 – 11.00	Construction of Maps.
	11.00 – 12.30 P.M.	Scales and Protractors.
	2.00 – 3.30	Bearings, Rays, Meridians.
	3.30 – 4.30	Map Setting.
	4.30	Reduction of Notes.
<u>Second Day:</u>	9.00 – 10.30 A.M.	Verniers, Compass, Sextant.
	10.30 – 12.30 P.M.	Field Sketching.
	2.00 – 4.30	Practical Field Sketching.
	4.30	Reduction of Notes.

<u>Third Day.</u>	9.00 – 10.30 A.M. 10.30 – 12.30 P.M. 2.00 – 4.30 4.30	Correction of Field Sketches. Abney Level, Contouring. Practical Contouring. Reduction of Notes.
<u>Fourth Day:</u>	9.00 – 10.00 A.M. 10.00 – 11.30 11.30 – 12.30 P.M. 2.00 – 4.30 P.M. 4.30	Contouring. Cross Sections; Visibility of Points. Musketry. Indirect and Overhead Fire. Reduction of Notes.
<u>Fifth Day:</u>	9.00 – 11.00 A.M. 11.00 – 11.30 11.30 – 12.30 P.M. 2.00 – 4.30 4.30	Reduction and Use of Sextant. Plane Table. Lecture: "M.Gs. in Defence." Practical Resection. Reduction of Notes.
<u>Sixth Day:</u>	9.00 – 11.30 A.M. 11.30 – 12.30 P.M. 2.30 – 4.30 4.30	Indirect Fire. Lecture: "M.Gs. in Attack." Practical Gun Laying. Reduction of Notes.
<u>Seventh Day:</u>	9.00 – 12.30 P.M. 2.00 – 4.30 4.30	Safety Angles and Reverse Slopes. Triangle of Reference, "Tables." Reduction of Notes.
<u>Eighth Day:</u>	9.00 – 9.30 A.M. 9.30 – 10.30 10.30 – 12.00 12.00	Probability of Errors. Supplies of Guns in Action. Copying, Enlarging and Reducing Maps. Dismiss.

#### **Duration of Courses.**

Courses continued until the plans for the VIMY RIDGE Attack were well forward. In this way 80% of the Officer Personnel of the Machine Gun Service were given a most useful working knowledge of Indirect Fire Methods.

## VIII.

### RESUME OF MACHINE GUN STRENGTH. March 31st, 1917.

It is of some interest at this point to survey the Machine Gun Strength of the Overseas Forces of Canada when the Divisional Companies had been formed. At this time the Fifth Division was in process of formation at BRAMSHOTT and in January, 1917, its three Brigade Machine Gun Units were mobilized as the 17th, 18th and 19th Machine Gun Companies. The total of Machine Gun Officers and Other Ranks in the Field at the end of March, 1917, was 3604, while in England there were 2561, making a grand total of 6165 All Ranks in the Machine Gun Service, distributed as follows:-

A. In the Field.		Officers	Other Ranks	TOTAL All Ranks
	16 M.G. Companies	160	2,832	2,992
	1 M.M.G. Brigade (5 Batteries)	22	360	382
	1 M.G. Squadron	<u>10</u>	<u>220</u>	<u>230</u>
	TOTAL	<u>192</u>	<u>3,412</u>	<u>3,604</u>
B. In England				
	17th, 18th & 19th M.G. Companies	30	531	561
	M.G. Depot, SEAFORD		<u>2,000</u>	<u>2,000</u>
	TOTAL	<u>30</u>	<u>2,531</u>	<u>2,561</u>
TOTAL All Ranks				
	In France	3,604		
	In England	<u>2,561</u>		
	GRAND TOTAL	<u>6,165</u>	All Ranks.	

Following are the names of Units, D.M.G.O.s and Officers on March 31st, 1917:-

#### First Division.

##### D.M.G.O. Major T.H. RADDALL.

	1st C.M.G. Company.	2nd C.M.G. Company.
Officer Commanding	Captain W.M. PEARCE	Major R.McP. STEWART
	Lieut. D.S. BANKIER	Lieut. H. CARTER
	Lieut. A.S. BLEAKNEY	Lieut. W.D. DARLING
	Lieut. H.E. DETCHON	Lieut. J.A. DEWART
	Lieut. W.H. GILLARD	Lieut. T. DOMAILLE
	Lieut. B.S. HEATH	Lieut. G.C. FERRIE
	Lieut. P.K. HEYWOOD	Lieut. R.M.L. GLADNEY
	Lieut. G. HYMERS	Lieut. E. HOLTZMAN
	Lieut. A.H. KETCHESON	Lieut. D. JENKIN
	Lieut. C.M. MACREATH	Lieut. F. LAYTON
		Lieut. A.C. McFARLANE
		Lieut. T.B. SMITH (attached)
	3rd C.M.G. Company	13th C.M.G. Company
Officer Commanding	Major E.H. HOUGHTON	Lieut. J. KAY
	Lieut. V.E. CHAMBERS	Lieut. G.W.N. DAY
	Lieut. H. DONALD	Lieut. A. DENHOLM
	Lieut. M.S. HAAS	Lieut. G.H. DUNBAR
	Lieut. J.A. HOUSE	Lieut. J. MAITLAND
	Lieut. R.H. MORRIS	Lieut. W.B. MILNER
	Lieut. H.V.de ST. REAL	Lieut. D.A. McINTOSH
	Lieut. W.J. SCOUGAL	Lieut. A. McKENZIE
	Lieut. T. STEELE	Lieut. C.G. McLEAN
	Lieut. R.H. MATTHEWS	Lieut. A.E. PARKER
	Lieut. R.D. TAYLOR (Attached)	

### **Second Division.**

D.M.G.O. Major W.D.B. GOODFELLOW.

	4th C.M.G. Company.	5th C.M.G. Company.
Officer Commanding	Major W.J. FORBES-MITCHELL	Major S.W. WATSON
	Captain J.G. WEIR	Lieut. A.C. BOWLES
	Lieut. W.L. CAMPBELL	Lieut. H.A. CREIGHTON
	Lieut. G.F. CLINGAN	Lieut. O.B. ELLER
	Lieut. W.R. COX	Lieut. C.V. GRANTHAM
	Lieut. C.W. DUFF	Lieut. G. HOBSON
	Lieut. R. FLEMING	Lieut. W.H.F. KETCHESON
	Lieut. A.D. GRAY	Lieut. H.A. McBURNEY
	Lieut. J.A. McCAMUS	Lieut. H.B. SINCLAIR
	Lieut. W.D. NORTHGRAVE	Lieut. B.A. TAYLOR
	Lieut. J.H. RAMSAY	
	Lieut. W.J. SMALLACOMBE	
	Lieut. L.F. WHITE	

	6th C.M.G. Company.	14th C.M.G. Company.
Officer Commanding	A/Major A. EASTHAM	A/Major J. BASEVI
	Lieut. J.W.V. DICKIE	Lieut. P.J. BULLOCK
	Lieut. W.L. HARDIMAN	Lieut. G.N. DOUGLAS
	Lieut. E.R. ROBINSON	Lieut. T.F. O'FLAHERTY
	Lieut. J. STONEHEWER	Lieut. W.C. THOMPSON
	Lieut. W.F. TUCKER	Lieut. J. TURNER
	Lieut. J. WADDINGTON	Lieut. L.F. WHITE
	Lieut. C.V. WILLIAMS	Lieut. T. DICK (Attached)

### **Third Division.**

D.M.G.O. Major J.W.H.G.H. VAN den BERG.

	7th C.M.G. Company.	8th C.M.G. Company.
Officer Commanding	Lieut. D.S. FORBES, M.C.	Lieut. J.R. COULL
	Lieut. F.W. BURNHAM	Lieut. V. BECKETT
	Lieut. H.E.B. COYNE	Lieut. J. DICKINSON
	Lieut. J.J. DIXON	Lieut. G.Q. DOWLING
	Lieut. F.A. HALE	Lieut. R.S. HICKS
	Lieut. B.J. MOTHERSILL	Lieut. H.J.G. MORGAN
	Lieut. E.R. MORRIS	Lieut. H.J.R. PARKES
	Lieut. J.C. McDOWELL	Lieut. J.K. PITCAIRN
	Lieut. H. McKENZIE	Lieut. D.W. ROWAT
	Lieut. F.M. WHEATLEY	Lieut. J. THOMSON (Attached)
	9th C.M.G. Company.	15th C.M.G. Company.
Officer Commanding	Lieut. A.M. McFAUL	Captain W.N. MOORHOUSE
	Lieut. J.H. CLARK	Lieut. C.E. GARNEAU
	Lieut. K.E. DRINKWATER	Lieut. F.McK. GARRISON
	Lieut. M.L. ELLIS	Lieut. J.C. HARTLEY
	Lieut. J.S. HENRY	Lieut. W.J. HUTCHENS
	Lieut. E.H.I. INGS	Lieut. P.C. MULHOLLAND
	Lieut. H.A. JOHNSON	Lieut. J.R. McLEAN
	Lieut. A.R. MADGETT	Lieut. G.W.H. MILLICAN (Attached)
	Lieut. L.S. PAGE	
	Lieut. W.G. CAIRNS (Attached)	

### **Fourth Division.**

D.M.G.O. Captain H.F.V. MEURLING, M.C.

Officer Commanding	Lieut. J.C. BRITTON	Major B.M. CLERK
	Lieut. F.W.G. BARBER-STARKEY	Lieut. H.J. BURDEN

Lieut. I. DICKENSON  
 Lieut. H.A. FOWLER  
 Lieut. H.R. GOODDAY  
 Lieut. A.E. LADLER  
 Lieut. G. SAGE  
 Lieut. C.F. THOMPSON  
 Lieut. K. WEAVER

Lieut. W.P. CLIFTON  
 Lieut. J.P. CONNOLLY  
 Lieut. R.McG. FOSTER  
 Lieut. A.G. GATES  
 Lieut. T.F. MURRAY  
 Lieut. A.G. SCOTT  
 Lieut. W.A. SHIELDS  
 Lieut. W. STRONG  
 Lieut. N.L. BURT (Attached)  
 Lieut. A.B. ROBINSON (Attached)  
 Lieut. H.L. STAVELEY (Attached)  
 Lieut. V.C. QUAYLE (Attached)  
 Lieut. J.M. WHITEHEAD (Attached)

12th C.M.G. Company.

Officer Commanding Lieut. L.F. PEARCE  
 Lieut. T.H.H. BEVAN  
 Lieut. C.D. COTTON  
 Lieut. I.C. HALL  
 Lieut. H.E. HENDERSON  
 Lieut. E.J.K. NORRIS  
 Lieut. H.A. PEVERLEY  
 Lieut. H. RAMSAY  
 Lieut. A. RICHARDS  
 Lieut. J.A. RIDDELL  
 Lieut. W.G. WILLIAMS

16th C.M.G. Company.

Captain E.W. SANSOM  
 Lieut. A.W. ALLAN  
 Lieut. L. GAVREAU  
 Lieut. S. JOHNSTON  
 Lieut. H.T. LOGAN  
 Lieut. R.D. MATHESON  
 Lieut. B.C. MONTAGNON  
 Lieut. E.L. RAINBOTH  
 Lieut. A. RITCHIE  
 Lieut. W.H. WATSON  
 Major F.S. POVAH (Attached).

**1st C.M.M.G. Brigade.**

Officer Commanding  
 Adjutant

Lieut.-Colonel F.A. WILKIN  
 Lieut. A.E. BAKER  
 Major M.A. SCOTT  
 Captain W.F. BATTERSBY  
 Captain E.H. HOLLAND  
 Lieut. T. BROTHERTON  
 Lieut. R.C. CLARKE  
 Lieut. L.G. FRANCIS  
 Lieut. M.R. LEVEY  
 Lieut. J.K. LAWSON  
 Lieut. F.C. YOUNG

Borden

Motor Machine Gun Battery.

Officer Commanding Captain P.A.G. MacCARTHY  
 Lieut. A.E. KILL  
 Lieut. F.W. THOMPSON

Eaton

Motor Machine Gun Battery.

Lieut. G.F. SCROGGIE  
 Lieut. F.P. O'REILLY  
 Lieut. E. OSBORNE (Detached)

Yukon

Motor Machine Gun Battery.

Officer Commanding Lieut. W.C. NICHOLSON  
 Lieut. W. BLACK  
 Lieut. R.D. HARKNESS, M.C.  
 Lieut. J.A. Mac KINNON.

## **IX.**

### **FORMATION OF CANADIAN MACHINE GUN CORPS.**

**April 16th, 1917.**

#### **Status of Personnel prior to Formation of C.M.G.C.**

The entire Machine Gun Personnel of 222 Officers and 5943 Other Ranks, though belonging to independent Units and undergoing separate and different forms of Training from the Infantry, were still on the Strength of Infantry Units and shown as seconded to the various Machine Gun Units. Questions of seniority and promotion were settled by Infantry lists, a condition which, of course, worked a great hardship upon the Machine Gun Service, for there was no incentive for Officers and Other Ranks to join the Machine Gun Service, or to remain and take an interest in their work if they found themselves serving with a Machine Gun Unit. Many Officers returned to their Infantry Units because of this unsatisfactory condition of things. Machine Gun Companies had now been in existence over a year: they had developed fighting traditions, individuality and a degree of technical skill in the use of their weapons. The time was ripe for the bringing together of all the separate diverse Machine Gun Units under a single administrative Formation.

#### **Application for a C.M.G.C.**

On January 15th, 1917, application was made by Lieutenant-General Sir JULIAN BYNG, Commanding the Canadian Corps, for authority to form "a Canadian Machine Gun Corps on similar lines to that of the British service." The serious condition of the Machine Gun Service at the time is clearly indicated in the Corps Commander's letter:-

"The situation of the Machine Gun Companies serving with the Canadian Corps as regards supply of personnel, conditions of service, and promotion is highly unsatisfactory and has resulted in extravagance, inefficiency and discontent.

"To remedy this serious state of things the creation of a Canadian Machine Gun Corps should be undertaken forthwith, and I attach the greatest importance to this step being taken without delay.

"As things are at present the Machine Gun Companies of the Canadian Corps must inevitably break down during active operations."<sup>37</sup>

#### **Authorization: Constitution.**

This application was favourably considered and the formation of the Canadian Machine Gun Corps authorized as from April 16th, 1917,<sup>38</sup> just a week after the capture of VIMY RIDGE. The constitution was set forth as follows:-

"Organization.

"The Canadian Machine Gun Corps will be divided into three Branches and the Depot:-

- (a) Cavalry
- (b) Infantry
- (c) Motor Machine Gun Service.

"Composition of Personnel.

"The personnel will be provided by the transfer to the Canadian Machine Gun Corps of all ranks now in the several branches of the Canadian Machine Gun Service in the Field and in England.

"Officers.

"Officers will be transferred, and, in special cases, seconded to the Canadian Machine Gun Corps, a seniority list will be established and future promotions will be made from the Seniority List of the Canadian Machine Gun Corps, in their respective Branches, by selection with due regard to seniority. Officers who become casualties, on recovering will be employed on training duty in England, but are to be made available for service in the Field as soon as pronounced fit for General Service.

---

<sup>37</sup> (C.C. G.669/6 d/15-1-17).

<sup>38</sup> G.O. 101./1917.

“Officer Instructors at the Machine Gun Depot are, as far as possible, to be selected from Units in the Field and are to be regarded as being on an equality for promotion with Officers in the Field.

“The required supply of Officers to be secured from the following sources on organization, and subsequently for maintenance of Officer personnel:-

- (a) Reintegration by transfer to the Canadian Machine Gun Corps of Officers previously in the Machine Gun Service and now serving in Infantry Battalions.
- (b) By transfer of casualty Machine Gun Officers now on the General List in England.
- (c) By transfer to the Canadian Machine Gun Corps after a period of instruction and probation all Officers who may be available for service in the Canadian Machine Gun Corps.
- (d) By promotion from the ranks after an adequate Course of Instruction, candidates qualified to become Officers in the Canadian Machine Gun Corps.

“Other Ranks.

“The Other Ranks of the Canadian Machine Gun Corps will be composed of W.O.’s, N.C.Os, and men transferred from their present Corps to the corresponding branch of the Canadian Machine Gun Corps, and also of men of superior intelligence and physically suitable for the Machine Gun Corps transferred from training Battalions, etc: after acceptance at the Machine Gun Depot. Men whom it is found will not make good Machine Gunners are to be retransferred to their original Units.

“Promotions Other Ranks in the Field.

“Promotion up to and including the substantive Rank of Sergeant will be made by the O.C., the Brigade Machine Gun Squadron or Company on a roster comprising all personnel of Machine Gun Corps serving in the Brigade Machine Gun Squadron or Company.

“Promotion to Acting Colour Sergeant appointment as Acting Squadron or Company Sergeant-Major, or ACTING Squadron or Company Quartermaster Sergeant will be made personally by the O.C., the Machine Gun Squadron or Company.

“Promotion to Colour Sergeant appointment as Squadron or Company Sergeant-Major or Squadron or Company Quartermaster Sergeant will be made by the A.A.G., Canadian Section, 3rd Echelon, General Headquarters, for the personnel of Machine Gun Corps of each Cavalry or Infantry Division in the Field.

“Promotion in the Motor Machine Gun Service up to or including the substantive rank of Sergeant and temporary promotion to Acting Battery Sergeant-Major will be made by the O.C., the Motor Machine Gun Battery.

“Promotion to Battery Sergeant-Major will be made by the A.A.G., Canadian Section, 3rd Echelon, General Headquarters, from a roster kept by him of all Sergeants in the Motor Machine Gun Service in the Field, recommended for promotion by their Battery Commanders.

“Promotion Other Ranks in England.

“Promotion up to and including the Acting Rank of Sergeant will be made by the O.C. Machine Gun Depot or Os.C. Brigade Machine Gun Squadrons, Batteries or Companies mobilizing in England from the roster kept by the Os.C. the several units.

“Promotions to Acting ranks above that of Acting Sergeant will be made by the O.C. Canadian Machine Gun Depot, from a roster of all Acting Sergeants of the Canadian Machine Gun Corps in England recommended for promotion by their own Squadron, Battery or Company Commanders.

“Establishments:

- (a) “The Units to be maintained are the several Machine Gun Companies, Machine Gun Squadron, and Motor Machine Gun Brigade, organized under W.E. Pat VII and W.E. Part XVI, 1916, at present serving with the British Expeditionary Force, and certain Machine Gun Companies mobilizing for service Overseas under the same Establishments.
- (b) “In addition to the Machine Gun Units serving or mobilizing for service in the Field, a Machine Gun Depot is organized in England under the Establishment laid down in Routine

Order No. 150, Headquarters Canadians, dated 4th January, 1917.”  
(Reference: A.G. Canadians, 43-3-15).

### **Command.**

It is to be observed that the question of command was not dealt with in the above contribution: its contents have to do solely with administration, with the provision of Machine Gun Personnel, and with looking after their interests when provided. But though the question of authority over Machine Guns was not directly advanced by the authorization of the Corps, Machine Gun Service was very greatly benefited by the formation of this central echelon.

### **Promotion: Reinforcements.**

A career was guaranteed to Machine Gun Officers and Other Ranks within the limits of promotion on the Corps, and provision was made for a continuous supply of trained Reinforcements by the inclusion of an Establishment for a recognized Machine Gun Depot in England. The reorganization of the Depot had already been carried out, pending the authorization of its Establishment. (See Page 67). The supply of trained Officer personnel was further increased by the provision for reintegration by transfer of Officers formerly in the Machine Gun Service who had returned to their Infantry Units.

### **Conditions of Transfer.**

A firm foundation was laid for future successes in the Field by the high standard set up for admission of Personnel to the Machine Gun Corps. Officers of other Branches of the Service available for transfer were to be given instruction in Machine Gun work during a period of probation: Other Ranks, transferred to the Machine Gun Corps, who showed themselves unlikely to become efficient Machine Gunners were to be transferred to their original Units. It was also provided that only Other Ranks of “superior intelligence and physically suitable” were to be accepted for transfer from training Battalions.

### **Canadian M.G. Squadron.**

The Cavalry Branch of the Corps consisted of the Canadian Machine Gun Squadron. This Unit, while technically on the strength of the Machine Gun Corps, in practice was detailed from the Canadian Corps and operated with a Cavalry Division of the British Forces. Its administrative needs were attended to by the Formation to which it was attached from time to time.

### **Canadian M.G. Depot.**

As regards the Machine Gun Depot in England, its reorganization was carried out under the direction of the Corps Machine Gun Officer, and the Commanding Officer, Lieut.-Col. W.M. BALFOUR was provided from the Field; but the Depot was administered from Canadian General Headquarters in London.

### **Headquarters Staff.**

A temporary Staff to assist the C.M.G.O. was appointed at this time as the constitution made no provision for a Headquarters Staff. This omission was, however, remedied on March 19th, 1918, when the Headquarters Staff was authorized and the following appointments were made:-

Major W.B. FORSTER, M.C.	27th Canadian Infantry Battalion
Staff Officer to C.M.G.C. Commander. (Graded as Brigade Major).	
Captain J.K. LAWSON	1st C.M.M.G. Brigade.
Lieut. W.T. TRENCH	C.M.G.C. Pool,
Staff Lieutenant for Reconnaissance Duties.	

### **Changes in Staff.**

On April 24th, Lieut. P.M. HUMME replaced Lieut. W.T. TRENCH as Reconnaissance Officer when the latter received the Command of a Battery in 1st C.M.M.G. Brigade.

In the Summer of 1918, the addition of a Staff Learner to the Staff was authorized and Captain M.R. LEVEY was appointed to fill the position.



**C.M.G.C. a Separate Branch.**

By the granting of this constitution the Machine Gun Corps became an independent Branch of the Canadian Overseas Forces, on a par with the Infantry, Artillery, Engineers, Cavalry, &c. It may be said that the corporate life of the Corps had its beginning at this time, and all those subsequent changes in organization served but to emphasize the individuality of its life and its active, original and progressive independence of character.

## **X.**

### **PROVISIONAL FORMATION OF DIVISIONAL MACHINE GUN “BATTALION”. August 23rd, 1917.**

#### **INTRODUCTORY.**

##### **Grouping of Companies Recommended.**

Two months after the provisional appointment of Divisional Machine Gun Officer Lieut.-Col. BRUTINEL recommended to the Corp Commander “that the Machine Gun Companies of a Division should be grouped under a Group Commander, with a suitable Staff. The Commanders, Machine Gun Companies, would be responsible for the training and efficiency of the Machine Gun Companies and would co-ordinate the tactical employment of the Machine Gun Companies under the General staff of the Division.”<sup>39</sup>

##### **Chief Reason.**

The chief reason for the change put forward by the Corps Machine Gun Officer was that, under the prevailing organization the Machine Gun Personnel could not acquire and maintain the increasing high standard of Training required of them. The modified employment of Machine Guns in Overhead and Barrage Fire demanded of Officers and Men greater technical knowledge and skill than was formerly necessary, whereas the distribution of Companies among Brigades was unfavourable to the maintenance or improvement of training standards “by reason of their employment in the line or other reasons.” Some companies were well-trained, others were less well-trained, their “comparative efficiency reflecting in the main the personality of the Company Commander.”

##### **Other Reasons.**

There were difficulties too in the way of the Provisional D.M.G.O.’s supervision of the work of the Machine Gun Units. By the terms of his office he “assisted” Divisional and Brigade Commanders in co-ordinating the Organisation, Training, and Technical Employment of all the Machine Guns in the Division, just as the Brigade Machine Gun Officer had assisted Brigade and Battalion Commanders in Machine Gun matters in the Brigade: but as was the case with the B.M.G.O., so to a much greater degree with the D.M.G.O., there were practical difficulties in the way of translating this assistance into results.

##### **D.M.G.O.’s Lack of Authority.**

In the first place the D.M.G.O. had no real authority. In the Line and out of the Line Machine Gun Companies were with their Brigades, and in all matters of Tactics, Administration and Training, Company Commanders were responsible to the G.O.C. Brigade. The D.M.G.O. might inspect Machine Gun Units as to their state of Discipline and Training: he could not issue Orders, on his own authority, to improve or correct conditions which he found prevailing. A further difficulty was that, even had the D.M.G.O. possessed the requisite authority, his supervision of Organisation and Training could with great difficulty be made effective so long as the Units with which he had to do were billeted, when out of the Line, each in its own Brigade Area.

It was to remove these difficulties, which experience showed to impede the work of the D.M.G.O., that Lieut.-Col. BRUTINEL recommended the grouping of the 4 Companies in each Division under a Senior Machine Gun Officer and giving to this Officer the “responsibility” for their Training and efficiency.

##### **Derivative Advantages.**

At the same time it was urged that other advantages would be derived from this Organisation besides improvement in Training and efficiency. Among these advantages were the following:-

- (1) Uniformity of doctrine in the Division.

---

<sup>39</sup> C.C.M.G. A 1/103218, dated February 12th, 1917.

- (2) Facilities for interchange and promotion of Officers and N.C.O.'s in the group on a Broader basis than is the case in the Brigade Companies.
- (3) Facilities for reorganization during heavy fighting, permitting the prompt re-construction of efficient and organized fighting elements.
- (4) Better distribution of the Machine Gun Companies on the Divisional Front, according to the tactical requirements; and better co-ordination.
- (5) Improved liaison with the Infantry and other Arms: the liaison would begin in 'fact' at the Divisional Headquarters.

It was maintained that these advantages were "sufficient to outweigh the sentimental objections which might be raised regarding the separation of Companies from the Brigade with which they had served." These sentimental objections had already been reduced as a result of the radical changes in the methods of recruiting Machine Gun Personnel.

## **ORGANISATION.**

### **Corps Commander's Recommendation.**

The recommendations of Lieut.-Col. BRUTINEL were warmly approved by Lieut.-General BYNG who forwarded them to Army with a covering letter in which he wrote:-

"I advocate very ardently the grouping of the four Machine Gun Companies in the Division."

"The standard of training at present is not level, nor is it likely to be under the present conditions."

"The tactics of Machine Gun Companies require a specialist and he can only be found when several Units are placed under one Command."<sup>40</sup>

### **\*\*\* Title not clear on photocopy \*\*\***

No authority for the new organization was received during the Summer of 1917. In the Autumn pending the receipt of authority, the organization was instituted provisionally, and the Four Machine Gun Companies in each Division were grouped into a Machine Gun Battalion. On August 23rd, instructions were issued by the Corps Commander for its provisional organization. His letter which stated shortly the reasons for the change, and the nature of the new organization, and defined with some detail the duties of the Divisional Machine Gun Commander (D.M.G.C.) is quoted in full:-

## **MACHINE GUN ORGANISATION.**

"Recent fighting experience tends to show that the present organization of Machine Gun Companies is not the best that could be devised for tactical purposes. For several months past it has been the exception rather than the rule for Machine Gun Companies belonging to Brigades to be covering only their own Brigades in the Line or to be withdrawn from the Line when their own Brigades go out for rest and training."

"With the increasing development of Machine Gun Fire this tendency will be more and more accentuated. It follows from this that Infantry Brigadiers, while normally responsible for the training and tactical employment of their Machine Gun Companies, have, in practice, little opportunity for supervising their discipline and training, while the tactical employment of their Machine Gun Companies has more often than not to be organized on a Divisional or Corps basis in which all the resources of the Division, and even of the Corps have to be pooled."

"The Corps Commander has therefore decided that all four Machine Gun Companies in each Division shall be grouped in one Unit under Divisional control. This Unit which will be known provisionally as the '-th Divisional Machine Gun Battalion,' will be commanded by the Divisional Machine Gun Officer, who will be known as the D.M.G. Commander and will be provided with the necessary Headquarters as laid down in Appendix "A" attached."

"This personnel will be provided under Divisional arrangements pending the establishment being approved officially."

---

<sup>40</sup> C.C. G.547. 61/16 dated February 14th, 1917.

“While the general administration of the Machine Gun Battalion will be in the hands of the D.M.G. Commander, each Machine Gun Company will continue to be a self-contained administrative Unit as at present.”

“The Divisional Machine Gun Commander’s duties will be, generally, as follows:-

- (1) “The D.M.G. Commander’s position will be analogous to that of the C.R.A. He will wear the Divisional Brassard with the M.G. Badge.”
- (2) “He will be solely responsible to the Divisional Commander for the training and administration of all the Machine Gun Companies of the Division.”
- (3) “He will assist the Corps Machine Gun Officer in all matters concerning the personnel of the Canadian Machine Gun Corps and in the technical machine gun training and organization of his units.”
- (4) “He will be the technical adviser of the Divisional Commander in all matters regarding the tactical employment of Machine Guns in attack and defence and will assist the Divisional and Brigade Staffs in co-ordinating all details connected therewith, including the organization of the necessary communications in conjunction with the Divisional Signal Officer, and the arrangement of Machine Gun Reliefs.”
- (5) “For the purpose of operations he will take executive command of any concentration of Machine Guns which the Divisional Commander may wish to make.”
- (6) “He will be responsible for keeping Infantry Brigadiers and Battalion Commanders in the line and on either flank of the Division informed as to the disposition of the Machine Guns covering their respective sectors, and will ensure that close and constant liaison is maintained between Infantry and Machine Gun Units.”

#### **“Battalion” Headquarters.**

“Battalion” Headquarters as detailed in Appendix “A” of the above letter was composed as under:

Commander <sup>41</sup>	1
Adjutant <sup>42</sup>	1
Clerks <sup>43</sup>	2
Batmen	2

#### **ASSEMBLING OF “BATTALIONS”.**

##### **1st Divisional Battalion.**

The change to the new Organisation, involving as it did the little alteration in Establishment, occurred with scarcely an outward sign that a change had taken place. The 1st, 2nd, 3rd, and 13th Companies were in the Line LIEVIN-LOOS Sector when the Order for their formation into a “Battalion” was published by the First Division on September 8th. Rear Headquarters of the 2 Right Companies, the 1st and 2nd, were at SAINS-EN-GOHELLE; the 3rd and 13th Companies had their Rear Headquarters and Transport Lines at LES BREBIS. These Locations were not altered until the end of the Divisional Tour, when all 4 Companies, on Relief, moved to Billets in DIVION and there came together for the first time as a “Battalion,” on October 18th, 1917.

##### **2nd Divisional Battalion.**

The Second Division Companies were in the Line for the capture of HILL 70 when the Order for the formation of M.G. “Battalions” was issued. On completion of this Tour they were relieved by Third Division Companies and proceeded to CAMBLAIN L’ABBE where they were first organized as a “Battalion.”

---

<sup>41</sup> Should be given the rank of Lieut.-Colonel.

<sup>42</sup> Rank of Captain.

<sup>43</sup> One of the Clerks to be a draughtsman.

### **3rd Divisional Battalion.**

Companies of the Third Division which relieved Second Division M.G. Units after the HILL 70 Operation were in turn relieved by First Division Companies on the night of 5th/6th September. Their first Tour with the new Organisation began at once on the VIMY SECTOR, with Transport Lines at AUX RIETZ-LA TARGETTE.

### **4th Divisional Battalion.**

The Transport Lines of the 10th, 11th, 12th and 16th Companies were brought together in a new Fourth Division Machine Gun Camp at CARENCY in the first week of September. The Companies were continuously in the Line when the Transition from Company to Battalion Organisation took place.

### **D.M.G.C.'s.**

The D.M.G.O.'s in each Division became D.M.G.C.s:-

First Divisional M.G. Battalion, Major S.W. WATSON, D.S.O.

Second Divisional M.G. Battalion, Major W.D.B. GOODFELLOW, M.C.

Third Divisional M.G. Battalion, Major W.N. MOORHOUSE

Fourth Divisional M.G. Battalion, Major E.H. HOUGHTON, M.C.

In the case of the Fourth Division Major HOUGHTON had been brought in as D.M.G.O. from the First Division in June 1917, to succeed Capt. H.F.V. MEURLING, M.C., evacuated sick in March, 1917. Major HOUGHTON relinquished the appointment of D.M.G.C. on Sept. 2nd on proceeding to join the United States Army, and was succeeded by Major M.A. SCOTT, D.S.O., of the 1st C.M.M.G. Brigade.

### **OBSERVATION ON "BATTALION" ORGANISATION.**

#### **Limited Powers of D.M.G.C.**

Each one of these Divisional M.G. Units was a "Battalion" in name only. It was not a Battalion in the sense of the work as applied to an Infantry Battalion. Each Machine Gun Company remained unchanged as an administrative Unit, keeping its own Records, with its own Orderly Room Staff and Q.M. Stores. "Q" requirements, Pay and Medical Services were attended to separately for each Company. O.S.C. Companies possessed punishment powers of a Commanding Officer. The D.M.G.C. was not a Commanding Officer in the normal meaning of the term. His powers of Command were exercised only in matters of Training.

Moreover at this stage the tie between the Brigades and Machine Gun Companies was still very strong. Brigade Staff thought and long continued to think of the Machine Gun Companies as "their own," as a Unit in their Brigade Group.

#### **Tactical Defects.**

This lack of real authority of the D.M.G.C. over Machine Gun Units in tactical matters was a very central weakness in the Organisation. It was soon recognized that the logical development of Machine Gun Organisation was the formation of a Battalion with a cohesive Battalion Organisation. A Commanding Officer cannot get the most out of his Command if he only has the supervision of Training. He cannot secure control of Officers and Men serving directly under him by meeting them on the parade ground alone. He must fight with his Unit; he must exercise control over his Men under Fire as well as in Billets if he is to obtain the fullest and best results of Training. This fact of Nature had eventually to be accepted, with necessary modifications, for the Machine Gun Corps as well as for other Branches of the Service. Again the dual control involved in this Organisation impaired the efficiency of the Machine Gun Service. When out of Line Machine Gun Units were under Orders of the Brigadier in whose area they were placed. In some cases Orders were given by the Brigade Staffs which entailed the employment of principles directly contrary to those received in Training. This was only natural; it reflected in no way upon the efficiency of the Staff Officers concerned: but was due rather to the fact that during the War, Machine Gunnery had become a special Branch of Military Science with Tactics of its own distinct from Infantry Tactics: to become an efficient Machine Gun Officer and to understand the correct employment of Machine Guns it was now necessary to "know the gun," its powers and possibilities, and to have

experience in the actual handling of it in the Field: and few Infantry Officers had this knowledge and experience. It could only be expected, therefore, that Machine Gunners under Orders of Infantry Brigadiers and Battalion Commanders should be asked to do tasks which were impossible or which should properly be carried out by the Lewis Gun. If any hesitation was shown to carry out the Orders of Brigade Staffs there was often a disposition to regard Machine Gunners as unwilling to do their full share of the work of fighting, whereas the central problem governing the entire development of Machine Gun Organisation and Tactics was, "given the Vickers Gun, with its own peculiar characteristics, how can it be best employed to support the Infantry under all conditions of warfare." It became more and more clear that Machine Guns could not be employed to the best advantage so long as this system of dual control was continued.

#### **Formation of Administrative Battalions Advocated.**

This Divisional Machine Gun Group known as "Divisional Machine Gun Battalion" was never officially authorized by G.H.Q. It was just a step in the development of the Machine Gun Battalion Organisation, and before its authorization took place it was superseded by a Battalion organized in fact as well as in form. Experience gained in the fighting of 1917 proved conclusively that the development could not rest at this stage. The Machine Gun Strength of a Division had to be fluid, - immediately available at that part of the Line where it was most needed: and it ought to be controlled in large measure in the Field as well as in periods of Training by qualified Machine Gun Officers. This fact began to be realized by the Higher Command towards the end of 1917, as is shown by the following extracts from a letter written on November 2nd, by General Sir H.S. HORNE, Commanding the First Army. The letter was forwarded to G.H.Q. in reply to the points for consideration under G.H.Q., No.)B./407, dated October 21st, 1917, and the Notes which accompanied it.

"I am strongly of the opinion, and am supported by a large proportion of the Divisional and Infantry Brigade Commanders, that the Machine Gun Companies should be organized as a Battalion, and form part of the Divisional Troops."

After indicating recent developments in Machine Gun Tactics, the letter concludes:

"The view of the correct tactical handling of Machine Guns advocated by me, and supported by the majority of opinion in this Army, is this:"

"They should be employed on similar principles to Artillery and be allotted to meet the tactical situation, and, as required, for training. To carry out this role, the Machine Guns must be organized in on formation and as Divisional Troops."

"Theoretically, every Infantry Brigadier and Battalion Commander should understand the training and the tactical employment of Machine Guns, but this is not the case in fact, I fancy but few Brigadiers now-a-days are fit to train a Machine Gun Company. The whole training is now a matter of 'cram,' it takes a Brigadier all his time to command and train four Battalions. The less thoroughly educated the Officers of the Army are, the more the necessity for experts in the different Arms. The D.M.G.O. should be responsible for the training of the whole of the Machine Gun Companies in the Division, in order that the training may be equal and uniform and the tactical use of the Machine Gun developed."

"I do not think that need be any fear, during the continuance of the war, that the senior Machine Gun Officers will not have sufficient general tactical knowledge to permit of their being posted to Command of Battalions."<sup>44</sup>

#### **Duration of New Organisation.**

This Divisional-Group, or so called Battalion Machine Gun Organisation was comparatively short-lived. The D.M.G.C. like his predecessor the D.M.G.O., had never more than a provisional existence in the Canadian Corps. This Organisation came into effect on September 1st, 1917: it persisted during the Operations of the Third Battle of YPRES (PASSCHENDAELE), and on through the Trench Warfare of the Winter of 1917-18. On February 22nd, 1918, it was superseded by a form of Battalion Organisation which proved to be the fore-runner of that final Organisation assumed by Battalions of the Canadian Machine Gun Corps.<sup>45</sup>

---

<sup>44</sup> First Army No. 1587 (C).

<sup>45</sup> See Page 131 and Page 150.

## **XI.**

### **IMPROVEMENT IN INSTRUCTIONAL AND REINFORCING ARRANGEMENTS.**

#### **FORMATION OF MACHINE GUN WING, CANADIAN CORPS SCHOOL. AUGUST 18TH, 1917.**

##### **Instruction in the Summer of 1917.**

In the Summer of 1917, while efforts were being put forward to improve the existing Machine Gun Organisation, the interests of Machine Gun Instruction were also receiving the attention of the Corps Machine Gun Officer. The School for Officers at PERNES had been discontinued in March, prior to the VIMY RIDGE Operation. Since that time there had been no central School of Machine Gun Instruction in the Canadian Corps in the Field. Training of Canadian Machine Gun Personnel was carried on during this period in the Machine Gun Companies themselves, at the Depot in England or at the G.H.Q., Small Arms School, CAMIENS.

##### **Formation.**

On July 26th, the first step was taken toward the formation of a Corps Machine Gun School in the Field. On this date Lieut.-Colonel BRUTINEL met the 4 D.M.G.O.'s to discuss the subject and it was decided to go on with Organisation. On August 8th, the C.M.G.O. submitted to the B.C., G.S. Canadian Corps a proposed Syllabus of Training for Officers and N.C.O.'s. On the 18th, Canadian Corps issued a letter<sup>46</sup> authorizing the School and setting forth its Organisation. On the 23rd, Captain M.R. Levey, 1st C.M.M.G. Brigade was appointed Chief Instructor.

##### **Staff.**

The School assumed the form of a permanent Machine Gun Branch of the Canadian Corps School; the permanent Staff was to consist of 2 Officers and 3 N.C.O.'s from the authorized Establishment of the Canadian Corps School. These were to be supplemented as required by Officers and N.C.O.'s from the C.M.G.O.'s Machine Gun Pool, or Machine Gun Units of the Canadian Corps.

##### **Objects.**

The Objects of the School were:-

- (1) To improve the General and Technical Knowledge of the Officers and N.C.O.'s.
- (2) To develop their Instructional ability.
- (3) To qualify Men for promotion to N.C.O. Rank.

##### **Attendance.**

Attendance at each Course was arranged for and allotments were distributed as follows:

	Officers.	Other Ranks.	TOTAL.
1 Officer, 1 N.C.O. and 1 Gunner from each M.G. Company	16	32	48
2 Officers, 2 N.C.O.'s and 2 Gunners from 1st M.M.G. Brigade	2	4	6
TOTAL	18	36	54

##### **Selection of Students.**

N.C.O.'s were to be selected from among the Senior Corporals suitable for Promotion to the Rank of Sergeant; Gunners were to be sent because of their suitability for Promotion to N.C.O. Rank.

---

<sup>46</sup> G.49-15-16 dated August 8th, 1917.

### **Entrance Examination.**

It was taken for granted that Officers and N.C.O.'s possessed a knowledge of Elementary Machine Gunnery and Instructional ability sufficient to teach it, so that Elementary Subjects were almost entirely omitted from the Courses. Candidates were obliged, however, to pass an Entrance Examination and those who failed to qualify were returned to their Units for further Training. The Examination was to bear in knowledge of the following subjects and ability to teach them:-

#### **MACHINE GUN WING – CANADIAN CORPS SCHOOL**

##### **ENTRANCE EXAMINATION.**

- A. Stripping – (care and correctness).
- B. Care and Cleaning.
- C. Mechanism and Nomenclature.
- D. Immediate Action and Setting up of Stoppages.
- E. How to conduct Test of Elementary Training.
- F. Allocation of Duties – (Sec.16 Inf. M.G. Coy. Training, 1917).
- G. Elementary Drill – (Sec.17 Inf. M.G. Coy. Training, 1917).

### **Syllabi.**

The following Syllabi of Training for Officers and N.C.O.'s were laid down and followed as closely as possible:-

#### **OFFICERS' COURSE.**

“A” Discipline and Allied Subjects.

- 1. Discipline.
  - (a) General Behaviour and Conduct of Officers.
  - (b) Personal Appearance, Physical Fitness, Punctuality.
  - (c) Bearing of Officers toward superior Officers, and N.C.O.'s and Men.
  - (d) Cheerful acceptance of discipline must be taught to Men, by example and precept.
  - (e) Strict and immediate repression of Crime essential.
- 1a. Arrest.
  - (a) Rules for.
  - (b) Telling off and disposal of prisoners.
  - (c) Crimes and punishment on Active Service.
  - (d) Field General Court Martial.
  - (e) Suspension of sentences, Army Act 1915.
- 2. Morale.
  - (a) Meaning and importance of Morale.
  - (b) Responsibility of Officers for the fostering of Morale. Patriotism, Devotion to Duty, Abnegation and Unselfishness, Comradeship, Unity of Action resulting from intelligent acceptance of rigid Discipline. Esprit de Corps, its wider as well as Regimental meaning.
  - (c) Fostering of spirit of Self-Reliance, Grit, Determination and endurance, which must characterize the Machine Gunners.
- 3. Leadership.
  - (a) Its meaning.
  - (b) How to acquire the gift of.
  - (c) Offensive spirit.
  - (d) Training of Men to look up to their Leaders.
- 4. The Art of Command.
  - (a) Its meaning.
  - (b) How to acquire it.



- (c) System to ensure continuity of purpose. (Devolution of Command).
  - (d) Issue of Orders, Written and Verbal.
  - (e) Orders – Operation, Standing, Routine.
5. Drill.
- (a) The Object and value of Drill.
  - (b) Its importance in ensuring the accurate execution of orders in Battle, and as a means of teaching Discipline.
  - (c) Close Order Drill. Section and Company Drill.
  - (d) Gun Drill.
  - (e) Communication or “Shouting Drill.” ) To develop the
  - (f) Acting as Instructors and checking faults. ) habit of Command.
6. Responsibility of Officers.
- (a) In Billets and At Training.
  - (b) On the March.
  - (c) In the Trenches.
  - (d) In Battle.
- “B” Organisation Routine Economy Sanitation
7. Organisation.
- (a) Canadian Expeditionary Forces.
  - (b) Canadian Corps.
  - (c) A Division.
  - (d) A Brigade.
  - (e) A Battalion.
  - (f) Canadian Machine Gun Corps.
  - (g) A Machine Gun Company.
8. Interior Economy.
- (a) Administration of a M.G. Company.
  - (b) Equipment of a M.G. Company.  
Equipment of a M.G. Section.  
Equipment of a Machine Gun.
  - (c) Scale of Clothing.
  - (d) Method of issue of Clothing and Equipment.
  - (e) Rations, scale of issue.
  - (f) Responsibility of Officers with regard to-
    - (i) Upkeep, Maintenance and Economy of Equipment and Clothing.
    - (ii) Proper Cooking and Distribution of Rations.
  - (g) Routine Duties of Officers and N.C.O.’s.
  - (h) Special Duties of Orderly Officers and N.C.O.’s.
9. Sanitation and Medical.
- (a) Object of, and Rules to follow.
  - (b) Responsibility of Officers with regard to maintenance of Health and Physical Efficiency.
    - (i) In Trenches.
    - (ii) In Billets.
    - (iii) In Bivouacs.
    - (iv) On the Line of March.
  - (c) Care of Feet, Standing Orders on the subject.
  - (d) First Aid and use of Field Dressing.
  - (e) General principles of Evacuation of Wounded.
- “C” Communications Messages Reports.
10. Correspondence.
- (a) Official Letters.
  - (b) Memoranda and Notes.
  - (c) Minutes.

11. Messages.

- (a) Use of A.F. c2121.
- (b) Method of writing a Message, method of finding a Person in the Field and delivery of the Message.
- (c) Verbal Messages, limitation of.

12. Reports.

- (a) How to be written.
- (b) Trench Reports.
- (c) Reconnaissance, reports. Illustration by Sketches.

“D: Infantry Tactics.

NOTE: THE SUCCESSFUL HANDLING OF MACHINE GUN COMPANIES IN BATTLE IS BASED ON THE CORRECT UNDERSTANDING OF THE INFANTRY TACTICS IN GENERAL AND ON THE DEFINITE AND DETAILED KNOWLEDGE OF THE ACTION IN PROGRESS AS WELL AS THE INTENTION OF THE INFANTRY COMMANDER; THEREFORE THE STUDY OF TACTICAL HANDLING OF THE MACHINE GUNS CANNOT BE DISSOCIATED FROM THE STUDY OF THE INFANTRY TACTICS.

13. Attack in open Warfare of Tactical Points.

- (a) Organisation previous to.
- (b) Distribution of Troops.
- (c) Formation with regard to Ground.
- (d) Formation with regard to Fire.
- (e) Close Communication with Troops on the Flanks.
- (f) Moppers up.
- (g) Handling of Machine Guns.

14. Defence in open Warfare.

- (a) Principle Lines of Defence, holding of Tactical Points.
- (b) Taking up a Defensive Line.
- (c) Siting Trenches by day and by night.
- (d) Handling of Machine Guns.

15. Attack in Trench Warfare.

- (a) Organisation for an Attack from Trenches.
- (b) Supply of Ammunition, Rations and Water.
- (c) Assembly Places.
- (d) Control Post.
- (e) Objective.
- (f) Direction of Attack.
- (g) Flanks.
- (h) Action of various Waves.
- (i) Action of Moppers up.
- (j) Handling of Machine Guns.
  - (i) Mobile Guns.
  - (ii) Barrage Guns.

16. Defence in Trench Warfare.

- (a) Construction of Trenches and improvised System of Defence.
- (b) Siting of Trenches by day and night.
- (c) Methods of holding Trenches.
- (d) Sapping.
- (e) Wiring.
- (f) Handling of Machine Guns.
  - (i) Distribution in Depth
  - (ii) Arrangements for Flanking Fire.
  - (iii) Nest on Tactical Points.

17. Protection of Troops.

- (a) At the Halt.
  - (i) Billets.
  - (ii) Outposts
- (b) On the move.
  - (i) Advanced Guards.
  - (ii) Rear Guards.
  - (iii) Flank Guards.

18. Co-Operation with all Arms.

General Principles of co-operation between M.G., Infantry, Artillery, Trench Mortars, Lewis Guns.

“E” Maps and Allied Subjects.

19. (a) Construction of Maps, Square System.

- (b) Compass, Principle, Construction, Handling.
- (c) Scales and Protractors.
- (d) Contours.
- (e) Map Setting.
- (f) Resection, Plane Table, Compass, Sextant.
- (g) Cross Section.
- (h) Value of correct Map knowledge from tactical point of view, and for Technical Machine Gunnery.
- (i) Trench Map, Situation Map, keeping up to date.
- (j) Field Sketching (Newton method).
  - (i) Value of Field Sketching to illustrate Reports.
  - (ii) Convey information regarding lay of Ground.
  - (iii) Range of Grads.

“F” Technical Machine Gunnery.

20. (a) First Elements of Musketry.

- (i) Theory of Rifle Fire, M.G. Fire, Influences.
- (ii) Indication and Recognition of Targets.
- (iii) Estimation of Distances.
- (iv) Fire Orders, Fire Control.
- (b) Characteristics of M.G. Fire.
  - (i) Various Methods of Application.
  - (ii) Capital Value of Short Range Enfilade Fire.

21. (a) The Theory of Indirect M.G. Fire.

- (b) Calculations, Tables, Graphs.
- (c) Tactical value of Overhead M.G. Barrage and Supporting Fire.
- (d) Organisation of Barrage.
  - (i) Terminology.
  - (ii) Fire Organisation.
  - (iii) Fire Orders.
  - (iv) Fire Control.
- (e) Preparation of Barrage Maps.
  - (i) Selection and rapid Organisation of Battery Positions (Camouflage).
  - (ii) Reduction of Barrage Time to Watch Time.
  - (iii) Preparation of Gunners Fire Slips.
  - (iv) Battery Drill.
- (f) Ammunition, Water and various Supplies.
- (g) Intercommunications, Liaison, Control.

22. Organisation of Harassing Fire.

- (a) Various Methods.
  - (i) Preparation for the Offensive.
  - (ii) In Active Sectors.
  - (iii) In Quiet Sectors.
- (b) Liaison with Intelligence, Artillery, Infantry.
- (c) Selection of Targets.

- (d) Preparation of Targets, Maps, Fire Organisation, Fire Orders.
- (e) Preparation of Position,
- (f) Emphasize value of "Concentration Fire".

23. Anti-Aircraft.

- (a) Mounts.
- (b) Special Sights
- (c) Method of applying Fire.

"G" Special Subjects.

24. (a) Aeroplane Photographs

- (i) Their Interpretation.
- (ii) Tactical value of Information conveyed.
- (b) Intelligence.
  - (i) Gathering and Diffusion of.
- (c) Organisation of a M.G. Position in Trench Warfare.
  - (i) Trench Orders, Routine and Standing, Log Book.
  - (ii) Fire Orders, Battle Orders.
  - (iii) Range Cards, Targets, Maps, Fire Organisation.
  - (iv) Trench Stores, Supplies, Inventories.
  - (v) System of making Reliefs.

(d) Physical Training.

- (i) Physical Fitness is the foundation of all Training. Physical Training is necessary to all Soldiers and vital to the Machine Gunners.
- (ii) Direct Methods are the best.

Time will be devoted to the application on the ground of all subjects requiring it, and also to the teaching of the Methods of Instruction of these subjects.

### **N.C.O.'s COURSE.**

"A" Discipline and Allied Subjects.

1. Discipline.

- (a) General Behaviour and Conduct of N.C.O.s.
- (b) Personal Appearance, Physical Fitness and Punctuality.
- (c) Knowledge of K.R. & O. paras. 431 to 546.
- (d) Cheerful acceptance of Discipline, value of Example.
- (e) Strict and Immediate repression of Crime essential.

1a. Arrest.

- (a) Rules for.
- (b) Making out Charge Sheet.
- (c) Making out Statement of Evidence.
- (d) How to give Evidence.
- (e) Responsibility for Warning Witnesses.

2. Morale.

- (a) Meaning and importance of Morale, created chiefly by good discipline.
- (b) Responsibility of N.C.O.s for the fostering of Morale, Patriotism, Devotion to Duty, Abnegation and spirit of Sacrifice, Comradeship, Unity of Action resulting from Esprit de Corps, its wider as well as its Regimental Meaning.

3. Leadership.

- (a) Its meaning.
- (b) How to acquire the gift of.
- (c) Offensive spirit.
- (d) Training the Men to look up to their Leaders.

4. Command.

- (a) Its meaning.
  - (b) How to acquire it.
  - (c) System to Ensuring Continuity.
  - (d) Issue of Orders, Written and Verbal.
  - (e) Bearing of N.C.O.s towards Men.
5. Drill.
- (a) Object and value of.
  - (b) Its importance to obtain cohesion, and as a means of Discipline. As a means of obtaining accurate execution of Orders in Battle, and the correct execution of all Motions required to keep Gun in action under great stress.
  - (c) Communication Drill, Elementary Gun Drill.
  - (d) Squad Drill.
  - (e) Section Drill.
  - (f) Company Drill.
6. Responsibility of N.C.O.s
- (a) In Billets.
  - (b) On the March.
  - (c) In Trenches.
  - (d) In Billets.
- “B” Organisation Routine Economy Sanitation
7. Organisation.
- (a) Of an Army Corps.
  - (b) Of a Division.
  - (c) Of a Brigade.
  - (d) Of a Machine Gun Company.
  - (e) Of a Canadian Machine Gun Corps.
8. Interior Economy.
- (a) Duties of N.C.O.s.
  - (b) Equipment of a Machine Gun Company.
  - (c) Equipment of a Machine Gun Section.
  - (d) Equipment of a Machine Gun.
  - (e) Scale of Clothing.
  - (f) Method of Indenting for Clothing and Rations.
  - (g) Method of Issue of Clothing and Rations.
  - (h) Responsibility of N.C.O.s with regard to upkeep and maintenance of Clothing and Equipment.
9. Sanitation.
- (a) Its object.
  - (b) Responsibility of N.C.O.s
  - (c) Rules to be followed:-
    - In Trenches.
    - In Billets.
    - On the March.
10. Guards and Pickets.
- (a) Duties of Commander.
  - (b) Duties of Sentries.
  - (c) Custody of Prisoners.
11. Essentials for Instructors.
- (a) Study of Text Books.
  - (b) Qualities of Machine Gun Instructors.
  - (c) Manner.
  - (d) Methods of Instruction.
  - (e) Instructional Kit.
  - (f) Mutual Instruction.

(g) Practice in Words of Command.

12. Those taking this course are expected to have a working knowledge of the Vickers Gun and of Elementary Drill. Further Instruction in the following is intended to develop Men as Instructors.

(a) Mechanism and Stoppages.

(b) Belt Loader.

(c) Elementary Drill.

(d) Night Practice in (a), (b) and (c).

“C” Communications Messages and Reports.

13. (a) Official Letters.

(b) Memoranda and Notes.

(c) Minutes.

(d) Field Messages, Method of Writing.

(e) Method of Finding a Person in the Field.

(f) Verbal Messages.

(g) Reports, how to be written.

(h) Trench Reports.

(i) Use of Telegraph, Telephone, Flares, etc.

(j) Inventories, taking over Trench Stores.

(k) Reconnaissance Reports and illustration by Sketches.

(l) Necessity of quick Communication in Battle.

“D” Tactics.

14. Handling of Machine Guns.

(a) In Open Warfare.

(i) Attack.

(ii) Defence.

(iii) Cover and the Use of Ground.

(b) In Trench Warfare.

(i) Attack.

(ii) Defence.

15. Protection.

(a) At the Halt:-

of Billets,

of Outposts

(b) On the Move:-

Advanced Guards.

Rear Guards.

Flank Guards.

“E” Physical Training.

16. (a) The Foundation of all other Training, necessity of, to all Soldiers, especially to Machine Gunners.

(b) Best Methods, Practical Instruction in.

“F” Maps and Allied Subjects.

17. (a) Construction and Square System, Conventional Signs.

(b) Scales and Protractors.

(c) Compass – Construction of, Use and Handling.

(d) Contours, locating and plotting.

(e) Setting of Maps, various Methods.

(f) Resection by Plane Table, Compass, etc.

(g) Cross Sections.

(h) Value of correct Map knowledge from a tactical point of view and for Technical Machine Gunnery.

(i) Trench and Situation Maps, how to keep up to date.

- (j) All Methods of finding and keeping Direction.
18. Field Sketching.
- (a) To illustrate Reports and convey information re Ground.
  - (b) Applied to Range Cards.
19. (a) Elements of Musketry and Influences including:-
- Theory of Rifle Fire.
  - Indication and Recognition of Targets.
  - Visual Training, Range Finders.
  - Fire Orders.
  - Fire Control.
- (b) Characteristics of Machine Gun Fire, and various applications, including Short Range, Enfilade Fire.
- (c) Theory of Indirect Fire.
  - (d) Calculations and Tables.
  - (e) Organisation of Barrages and supporting Fire. (Terminology).
  - (f) Fire Organisation.
  - (g) Fire Orders.
  - (h) Fire Control – various Methods (Whistles, Flappers).
  - (i) Preparation of Maps for Barrages.
  - (j) Selection and rapid Organisation of Positions.
  - (k) Reduction of Barrage Time to Watch Time.
  - (l) Written Orders for Gunners.
  - (m) Battery Drill.
  - (n) Ammunition and Water Supply.
  - (o) Liaison.
  - (p) Organisation of Harassing Fire:-
    - (i) Preparation for the Offensive.
    - (ii) During Operations.
    - (iii) In quiet Sector.
  - (q) Liaison with Intelligence, Artillery and Infantry in the Line.
  - (r) Selection of Targets.
  - (s) Preparation of Positions.
  - (t) Preparation of Targets, Maps and Fire Organization.
  - (u) Value of Concentration Fire.
20. Anti-Aircraft Sights and Mounts and their use.

### **Additional Lectures.**

Senior Machine Gun Officers from Units in the Corps lectured occasionally on experimental subjects and the Corps Machine Gun Officer gave frequent lectures on Machine Gun Organisation and Tactics. Lectures were also given on Staff Work, Infantry Tactics, Lewis Guns, Artillery, Engineers, Aircraft, Aeroplane Photographs, Tanks, Sanitation, etc., by Officers of the respective Branches of the Service. These lectures were not only of intrinsic value to members of the School as students of Military Science but also furthered the co-operation of Machine Gunners with other Arms of the Service by giving them a sympathetic understanding of the many different Branches that make up a modern Army.

### **Courses.**

Course lasted one month. The First Course commenced on October 1st, 1917, and was opened by Lieut.-Col. BRUTINEL. Courses continued regularly throughout the winter of 1917-18 and until the German Offensive in March, 1918, when the Sixth Course was broken up and the Guns at the School sent to reinforce Guns in the Field.

### **Influence of School.**

The Machine Gun Wing, Canadian Corps School, spread a sound knowledge of General Military Subjects and of Technical Machine Gunnery throughout the Machine Gun Service and did much to stimulate that "esprit" which has characterized the Machine Gun Corps. It served to give Machine Gun Units a solid basis of highly trained Officers and N.C.O.s, so that when the rapid expansion of Machine Gun Battalions

took place in the Spring of 1918 each Unit was able to train efficiently, and with comparative ease, a large proportion of their newly transferred Infantry Personnel.

### **SCHOOL FOR ANTI-AIRCRAFT FIRING WITH MACHINE GUNS AND LEWIS GUNS, JANUARY 1ST, 1918.**

#### **Anti-Aircraft Firing.**

The work at the Machine Gun Wing, Canadian Corps School, was supplemented, during February and March 1918, by the formation of a Special School for A.A. Firing. Machine Guns were employed early in the War against Hostile Aircraft. At first the Guns were fired over open sights from an impromptu Mounting. Later Sight devices and special A.A. Mounts were introduced and Machine Gun and Lewis Gun Personnel had to be trained in the use of their weapons for Anti-Aircraft Firing.

#### **Origin of School.**

The effectiveness of enemy low flying Aeroplanes, as well as the ineffectiveness of our Machine Gun A.A. Defences were demonstrated during the PASSCHENDAELE Operations, and as soon as the Corps returned to the LENS Area plans were undertaken for the formation of a school of Instruction in the use of Machine and Lewis Guns against Aircraft.

#### **Object.**

The object of the School, as stated in the Corps letter authorizing it<sup>47</sup>, was "to form a nucleus of Instructors in M.G.A.A. Firing in every Infantry Brigade and Machine Gun Battalion." The Attendance was not to exceed 32, the Personnel being drawn partly from Infantry and partly from Machine Gun Battalions. The Administration and Instructional Work of the School were placed under the supervision of the Corps Machine Gun Officer. Instruction included a study of models of our own and hostile planes, and by arrangement with the Royal Flying Corps demonstrations were given of our own Aeroplanes in flight.

#### **Courses.**

The School assembled at BRUAY, Courses lasted 5 days. The First Course began February 1st, 1918, and Instruction was continued during the month of February and the first fortnight of March. Lieut. P.A. Green, M.C., M.M., 1st C.M.M.G. Brigade, was in charge of the School.

Following is a copy of the Syllabus followed:-

- 1st Day: Opening Lecture.  
Explanation of special terms employed during the Course.  
Firing at hostile Aircraft.
- 2nd Day: Revision of Special Terms.  
Demonstration of A.A. Sights and Mounts.  
Elements of M.G.A.A. Fire, Location of A.A. Positions.
- 3rd Day: Description of Aeroplanes, including characteristics of hostile Planes (Models) (by arrangement with Canadian A.A. Group).  
Visit to Aerodrome.  
Practice with A.A. Sights and Models.
- 4th Day: Estimation of Distance and Height of flying Planes, Observation of Visibility at various heights. (By arrangement with R.F.C. a Plane will fly for the purpose of Demonstration).  
Practice with A.A. Sights, Models placed at various Positions.
- 5th Day: Revision of Syllabus; Discussion of points raised during the Course; Methods of Instruction in A.A. Machine Gun Fire.

\*\*\* Insert diagram of Battalion C.M.G.C., Company Organisation, 22-2-18. \*\*\*

---

<sup>47</sup> Canadian Corps G. 50/14-18.



## **FORMATION OF CANADIAN MACHINE GUN CORPS REINFORCEMENT DEPOT, SEPTEMBER 15TH, 1917.**

Negotiations were in progress throughout the Spring and Summer of 1917 for an improvement in M.G. reinforcing arrangements. These negotiations culminated in September in the formation of the Canadian Machine Gun Corps Reinforcement Depot (C.M.G.C.R.D.)

### **Early Arrangements.**

Up to February, 1917, no Machine Gun Reinforcements had been maintained in France<sup>48</sup>. They were dispatched from England to Units in the Field as required. In Active Operations the delay caused in this way might prove serious, and it was decided to establish a Reinforcement Centre in France.

### **CAMIERS Depot.**

An Independent Canadian Depot was not formed in the first instance. The British Machine Gun Depot was situated at CAMIERS, and application was made and granted by G.H.Q.<sup>49</sup> for the maintenance here of Reinforcements for Canadian Machine Gun Units in the Field as follows:-

	Officers	Other Ranks
Infantry Branch	13	195
Motor Branch	3	30
Cavalry Branch	2	55
<b>TOTAL</b>	<b>18</b>	<b>280</b>

This Personnel was dispatched from the Canadian Machine Gun Depot in England in February, 1917, and was maintained from SEAFORD. There was no Establishment: a Canadian Officer was placed in charge of it and the entire Personnel was included in one of the existing Depot Companies.

### **C.M.G.O.'s Pool.**

In April, 1917, a Pool of Machine Gun Officers was formed known as the "C.M.G.O.'s Pool." 16 Officers of the Infantry Branch were attached to Companies in the Field. Under this arrangement Officers newly-transferred to the Machine Gun Service were able to gain Machine Gun training and some experience of Machine Gun Work under Active Service conditions.

### **Motor Machine Gun Pool.**

A Motor Machine Gun "Pool" along similar lines was authorized at the same time. 5 Officers and 50 Other Ranks were attached to the 1st Motor Machine Gun Brigade for Training. The original intention was that successive batches were to be attached from the Base Depot for periods of 6 weeks, but the first Detachment were permanently attached as supernumerary to Establishment and were held by the 1st C.M.M.G. Brigade as First Reinforcements, not to be taken into Action until required to replace Casualties.

### **C.M.G.C.R.D. Authorized.**

These irregular Units, the Canadian Detachment at CAMIERS, and the Machine Gun Pools, continued to form the only link between the Depot at SEAFORD and Machine Gun Units in the Field until September, 1917. On the 15th of this month the Canadian Machine Gun Corps Reinforcement Depot (C.M.G.C.R.D.) was authorized without Establishment.<sup>50</sup>

### **Original Personnel.**

The Depot was to be composed of all Officers and Other Ranks attached to Machine Gun Companies and the 1st C.M.M.G. Brigade and surplus to War Establishments on September 15th. In effect, the

---

<sup>48</sup> See Page 66.

<sup>49</sup> G.H.Q. A.6864 dated February 2nd, 1917.

<sup>50</sup> Canadian Corps A.24-0-51 dated September 9th, 1917.

C.M.G.C.R.D. was a bringing under one name of the Personnel composing the Machine Gun Pools. The CAMIERS Base was maintained.

### **Branches of Depot.**

The Depot was divided into 2 parts<sup>51</sup>, the Infantry Branch and the Motor Branch. The former was established at DIVION, where the Personnel surplus to War Establishment from the Machine Gun Companies assembled: the Motor Branch remained with the 1st C.M.M.G. Brigade. It was organized by the Officer Commanding the Brigade, and continued under his supervision until May 27th, 1918, when it joined the Infantry Branch at AUBIN-ST-VAAST.

### **Temporary Establishment.**

For the Infantry Branch at DIVION a semi-permanent cadre was temporarily formed, composed as follows:-

Commandant  
Adjutant  
2 Officers – (Wing Commanders)  
A “suitable number” of N.C.O.s or Acting N.C.O.s.

### **Organisation of Infantry Branch.**

The Reinforcements were divided into 2 Wings, the Right Wing to reinforce the 1st and 2nd Divisions M.G. Companies, the Left Wing to reinforce the Companies of the 3rd and 4th Divisions. All Ranks received Machine Gun Training while at the Depot.

### **Staff.**

Major T.C. Bamfield was appointed Commandant and remained in charge until the Infantry and Motor Branches were amalgamated, when he assumed command of the combined Depot, June 10th, 1918. He continued in command until the Armistice. The following Officers assisted the Commandant in the Administration and Training of the Depot:-

Lt. W.D. DARLING, M.C.	Adjutant and Quartermaster
Lt. R.H. MORRIS	Wing Commander
Lt. J.C. McDOWELL, M.M.	Wing Commander

### **Increase in Scale of Reinforcements.**

At this time also the number of Reinforcements to be maintained in the Field was increased to 10% of the Strength of Active Units. The Distribution of Reinforcements on this new basis was laid down as follows<sup>52</sup>:-

	Officers	Other Ranks
At the C.M.G.C.R.D.		
Infantry Branch	20	200
Motor Branch	4	40
At CAMIERS		
Infantry Branch	4	100
Motor Branch	1	10
Cavalry Branch	1	24
With Unit (Surplus to Estab.)		
Cavalry Branch	2	42
TOTAL	32	416

<sup>51</sup> Canadian Corps M.G. 6/- dated September 22nd, 1917.

<sup>52</sup> A.G. A/19214 dated September 2nd, 1917, and G.H.Q. A.G./80(0) dated January 13th, 1918.

### **Advanced Reinforcements Depots.**

In order to facilitate the immediate supply of Personnel required to replace Casualties during the Active Operations Advanced Reinforcement Depots were formed near the Line, of Officers and Other Ranks supplied from the C.M.G.C.R.D., under arrangements made by the Commandant. Thus for the Canadian Corps Offensive Operations in the 3rd Battle of YPRES an Advanced Reinforcement Depot was formed at YORK CAMP, on the main YPRES Road, about 1 mile E. of POPERINGHE.<sup>53</sup>

### **Further Increase of Reinforcements Required.**

The Strength and Distribution of Reinforcements indicated above were in force during the PASSCHENDAELE Operations. Owing to the severe Casualties suffered by the Canadian Corps, and by the Machine Gun Units in particular a request was made immediately after these Operations<sup>54</sup> for an increase in the number of Machine Gun Reinforcements to be maintained in the Field. It was urged that, while the basis of the existing arrangements was the requirements of the British Machine Gun Corps, the proportion of Reinforcements required in the Field by the Canadian Machine Gun Corps was really greater, as the whole Corps was engaged at once, and not a part of it as was the case with the British Machine Gun Corps. In addition to this underlying defect in the existing arrangements, the development of Aerial Bombing and the employment by the enemy of Area Shooting had greatly increased the Casualties to Machine Gun Personnel.

The Canadian Authorities, however, were unable to comply with this request, and the numbers of Reinforcements in France remained unchanged in the meantime.

---

<sup>53</sup> Canadian Corps A.80-1-1 dated November 5th, 1917.

<sup>54</sup> Part II, Page 64.

## **XII.**

### **FORMATION OF 2-COMPANY MACHINE GUN BATTALIONS.**

**FEBRUARY 22nd, 1918.**

#### **AUTHORISATION OF NEW ESTABLISHMENT.**

##### **Divergence from British Organization.**

At this stage the Canadian Machine Gun Corps entered upon a path of development in organization which entirely diverged from that followed by the British Machine Gun Corps. Hitherto Canadian and British Machine Gun Organisation had been very similar. The Machine Gun "Battalion" adopted by the Canadian Corps in August, 1917, corresponded very closely with the British 4-Company Battalion whose Establishment was published by the War Office on April 2nd, 1918<sup>55</sup>. Five weeks before this organization was published, however, the Canadian Machine Gun Corps had been authorized to mobilize Machine Gun Battalions with a totally different and novel Establishment.

##### **Establishment Drawn Up.**

This Establishment was drawn up by Lieut.-Col. BRUTINEL on December 25th, 1917, after the Canadian Corps had returned from the YPRES Salient, after the PASSCHENDAELE fighting, and when it was doing ordinary Trench Routine on the LENS-MERICOURT-GAVRELLE Front.

##### **Increase in Personnel.**

Provision was made for the formation of a 2-Company Battalion, with 64 Guns, the same number as then existed in a Division, but with a Personnel of 43 Officers and 996 Other Ranks, totaling 1039 All Ranks, and increase of 2 Officers and 288 Other Ranks over the prevailing "Battalion" Strength. The differences in Strength of Personnel may be seen at a glance from the following table:

	Lieut.-Col.	Majors	Captains	Lieutenants	W.O. Class I	W.O. Class II	S/Sergeants	Artificers	Corporals	Privates	TOTAL
New Organisation (2-Company Battalion)	1	3	12	27	1	11	80	17	74	813	1039
Old Organisation (4-Company "Battalion")		4	5	32		4	40	12	652		749
Increase	1		7		1	7	40	5	235		296
Decrease		1		5							6

Aggregate Increase All Ranks 290.

##### **Command.**

The Battalion was to be commanded by a Lieut. Col. with a Major as Second in Command and a suitable Headquarters Staff. Each of the two Companies, with a Major in Command, was divided into 4 Eight-Gun Platoons, Commanded by Captains; each platoon was divided into 2 Four-Gun Sections, each Commanded by a Lieutenant, while a third Lieutenant was supernumerary in each Platoon. Each Gun Crew included both a Sergeant and a Corporal, thus doubling the Existing Strength in Gun N.C.O.'s.

##### **Gun Crews Self-Contained.**

The total of 8 Other Ranks on each Gun Crew, together with the 24 Carriers (3 per Gun), on each Platoon Strength was calculated to make the Machine Gun Units independent of Infantry assistance, and so to do

---

<sup>55</sup> W.E. 1918: No. 1133.

away with the practice hitherto found necessary of attaching Infantry-men as Ammunition Carriers for all important Operations.

#### **Tactical Unit Platoon or Battery.**

Perhaps the most striking innovation in this Establishment was the introduction of a new Tactical Unit – the Platoon, subsequently called a Battery. Under the previous organization it had been customary to regard the Section (4 Guns) as the Unit for tactical purposes: e.g., for special Operations, a Section of a Machine Gun Company would be detailed to operate with an Infantry Battalion. Under the new Establishment the Platoon or Battery took the place of a Section, and in Moving Warfare, it became the practice for a Battery of 8 Guns to work in conjunction with a Battalion. Each Platoon was independent as regards Specialists and Transport. The normal group of Guns for Barrage purposes had already been fixed at 8, so that the new organization was particularly well-suited to Machine Gun barrage requirements.

One of the most serious defects of the existing organization was that a great deal of the Senior Officers time was taken up with administrative work. Each Machine Gun Company being a self-contained, administrative Unit, had virtually the same amount of Orderly Room and “Q” work to do as an Infantry Battalion without a Headquarters Staff to do it, with the result that the Commanding Officer of a Machine Gun Company had very often to spend time and effort on administration, which should have gone to Tactical Work.

#### **Battalion Administration.**

Under the new Establishment a Battalion Headquarters Staff was provided to perform the administrative duties formerly done by Companies. The Headquarters Staff was to include a Second in Command, Adjutant, Quartermaster, Signalling Officer, Medical Officer and Paymaster.

#### **Corps Commander’s Recommendation.**

In forwarding this Establishment the Corps Commander maintained this to be the main recommendation for it. He wrote,

“The chief benefit from the organization will be derived from the fact that all Echelons below the Battalion Headquarters will be able to devote all their time to training and fighting.”

#### **Signallers.**

In order to improve communications the Signalling Personnel was nearly trebled. Under the 4-Company organisation there was a total of 16 Signallers in the Battalion, 4 of whom were Corporals: the new Establishment provided for 40 Signallers, 8 of whom were to be Lance Corporals, under the direction of a Signalling Officer.

**2-COMPANY MACHINE GUN BATTALION.**

**WAR ESTABLISHMENT 121/Overseas/53-a-2-(S.D.2),  
dated 22nd February, 1918.**

Detail	Personnel								Horses				Bicycles
	Officers	Warrant Officers Class I	Warrant Officers Class II	S/Sergeants & Sergeants	Artificers	Corporals	Privates	TOTAL	Riding	Heavy Draught	Light Draught	TOTAL	
Headquarters	5	1	1	3	1		19	30	6	4	3	13	
Headquarters Attached	2			1				3	2			2	
2 Companies	36		10	76	16	76	794	1006	20	4	206	230	16
TOTAL BATTALION (excluding Attached)	41	1	11	79	17	76	813	1036	26	8	209	243	16
TOTAL BATTALION (including Attached)	43	1	11	80	17	76	813	1039	28	8	209	245	16

**2-COMPANY MACHINE GUN BATTALION.**

**WAR ESTABLISHMENT (continued)**

**COMPOSITION IN DETAIL.**

**(i) Personnel & Horses.**

Detail	Personnel								Horses			
	Officers	Warrant Officers Class I	Warrant Officers Class II	S/Sergeants & Sergeants	Artificers	Corporals	Privates	TOTAL	Riding	Heavy Draught	Light Draught	TOTAL
HEADQUARTERS												
Lieut.-Colonel (Bn. Commr.)	1							1	1			1
Major (2nd in Command)	1							1	1			1
Adjutant (Captain)	1							1	1			1
Quartermaster (Captain)	1							1	1			1
Signalling Officer (Lieut.)	1							1	1			1
Battalion Sergeant-Major		1						1				
Battalion Q.M. Sergeant			1					1				
Armourer Staff-Sergeant					1			1				
Orderly Room Sergeant				1				1				
Transport Sergeant				1				1	1			1
Clerks (incl. 1 Draughtsman)							3	3				
Storeman							1	1				
Short Rein Driver							1	1				
Long rein Drivers							3	3		4	2	2
Cooks							2	2			1	
Batmen							7	7				
Water Details							1	1				
Shoemaker							1	1				
Pay Clerk				1				1				
TOTAL HEADQUARTERS (excluding Attached)	5	1	1	3	1		19	30	6	4	3	13
ATTACHED												
C.A.M.C.	1							1	1			1
C.A.P.C.	1							1				
Veterinary Sergeant				1				1	1			1
TOTAL HEADQUARTERS (including Attached)	7	1	1	4	1		19	33	8	4	3	15

Detail	Personnel								Horses				Bicycles
	Officers	Warrant Officers Class I	Warrant Officers Class II	S/Sergeants & Sergeants	Artificers	Corporals	Rank and File	TOTAL	Riding	Heavy Draught	Light Draught	TOTAL	
COMPANY HEADQUARTERS													
Major (Company Commander)	1							1	1			1	
Transport Officer (Lieut.)	1							1	1			1	
Company Sergeant-Major			1					1					
Company Q.M. Sergeant				1				1					
Signal Sergeant				1				1					
Signal Corporal						1		1					
Signallers (4 to be L/Cpls)							20	20					8
Storemen (1 to be attached to each Platoon)							4	4					
Cooks							2	2					
Batmen							2	2					
Short Rein Drivers							3	3			6	6	
Long Rein Drivers							2	2	2		1	3	
Saddlers							2	2					
Water Details							2	2					
TOTAL COMPANY HEADQUARTERS	2		1	2		1	37	43	2	2	7	11	8

Detail	Personnel								Horses				Bicycles
	Officers	Warrant Officers Class I	Warrant Officers Class II	S/Sergeants & Sergeants	Artificers	Corporals	Rank and File	TOTAL	Riding	Heavy Draught	Light Draught	TOTAL	
4 PLATOONS (Each)													
Captain (Platoon Commander)	1							1	1			1	
Section Commanders (Lieuts.)	2							2					
Lieutenant	1							1					
Platoon Sergeant-Major			1					1					
Transport Sergeant				1				1	1			1	
Gun Sergeants				8				8					
Transport Corporal						1		1					
Gun Corporals						8		8					
Armourer Corporal					1			1					
Gunners							48	48					
Shoeing Smith					1			1					
Carriers (Trained as Gunners)							24	24					
Cooks							2	2					
Batmen							4	4					
Short Rein Drivers							12	12			24	24	
TOTAL PLATTON	4		1	9	2	9	90	115	2		24	26	
TOTAL COMPANY	18		5	38	8	37	397	503	10		103	115	8

## 2-COMPANY MACHINE GUN BATTALION.

### WAR ESTABLISHMENT (continued)

#### COMPOSITION IN DETAIL.

##### (ii) Transport.

	Vehicles	Drivers	Heavy Draught Horses	Light Draught Horses
<b>BATTALION HEADQUARTERS</b>				
G.S. Wagons	2	2	4	
Cooks' Carts	1	1		1
Water Cart	1	1		2
<b>EACH COMPANY HEADQUARTERS</b>				
G.S. Wagons	1	1	2	
Field Kitchens	2	2		4
Water Carts	1	1		2
Cooks' Carts	1	1		1
<b>EACH BATTERY</b>				
G.S. Limbered Wagons	7	11		22
Drivers for Spare Draught Horses		1		2
Battery G.S. Limbers distributed thus:-				
For Supplies ... 1				
For 8 Guns, Tripods, Ammunition, etc. ... 4				
For Ammunition ... 2				
<b>TOTAL TRANSPORT</b>	<b>70</b>	<b>110</b>	<b>8</b>	<b>209</b>

#### Establishment Submitted.

The Establishment was forwarded on January 10th, 1918, by the Corps Commander, Sir Arthur CURRIE, with a covering letter in which he unreservedly recommended it.

"It is my considered opinion," he wrote, "that the employment of the Infantry and resulting wastage through casualties and sickness will be directly influenced this year, more than ever before, by the efficiency or otherwise of the Machine Gun Service."

It is urgent that the proposed Establishment be put in force as early as possible, so that the organization may be completed early this winter."<sup>56</sup>

#### Establishment Authorized.

This Establishment was authorized by the War Office as from February 22nd, 1918<sup>57</sup>:-

### ORGANISATION AND PROVISION OF PERSONNEL.

As soon as authorization was received from the War Office, arrangements were at once proceeded with to set the new Organisation going in each Division.

#### Provision of Personnel.

There was increase in Guns; those already in each Battalion were sufficient. The 4 Companies in each Division were re-organized to compose the greater part of the new Battalions, but a total of 1152 Other Ranks were still required for the 4 Divisional Units, 288 for each Battalion. As the Strength of the Machine Gun Depot was based upon the ordinary requirements of Units in the Field, caused by sickness and casualties, it was not possible to draw upon the Depot for this personnel. On the other hand a large

<sup>56</sup> C.C. A.29-1-34, dated Jan. 1st, 1918.

<sup>57</sup> 121/Overseas /53 a 2 (S.D.2)



number of Specialists were required to complete the new Establishment so that the Strength could not be made up entirely from the surplus Infantry in the Field, where there were no more trained Specialists than were sufficient for Infantry requirements. Under these circumstances the Corps Machine Gun Officer was authorized to select 200 Other Ranks from each Divisional Wing of the Canadian Corps Reinforcement Camp (C.C.R.C.); the remainder, chiefly Specialists and N.C.O.'s, were supplied from the Fifth Division Units then being broken up in England. The C.M.G.O. undertook to carry out in France the Machine Gun Training of Sergeants and Corporals so transferred, and the adapting of Specialists to the work required of them in the Machine Gun Service.

### **Training.**

The Personnel from England arrived on April 13th, 1918, and was absorbed in the Machine Gun Battalions already reorganized. The 8000 Other Ranks from the C.C.R.C. were trained as Machine Gunners under special arrangements made by each Divisional Machine Gun Commander, and when they had gained some knowledge of the Vickers Gun, were divided among trained and seasoned Gun Crews: so that the efficiency of Machine Gun Detachments was not impaired.

### **Period of Reorganization.**

This reorganization into 2-Company Battalions was carried out just at the time of the German March Offensive, 1918, and completed by the end of the second week of April. The Canadian Corps was still holding the Line on the LENS Front.

## **DETAILS OF EACH UNIT'S REORGANISATION.**

### **First Bn., C.M.G.C.**

The 4 First Cdn. Division Machine Gun Companies were reconstituted as the first Battalion, C.M.G.C., on March 27th 1918, at MARQUEFFLES FARM, a Reserve Camp on the VIMY Front, between BOUVIGNY Village and AIX NOULETTE. The 2nd and 3rd C.M.G. Companies were united to form No. 1 Company under the command of Capt. E.R. MORRIS. The 1st and 13th C.M.G. Companies were united in No. 2 Company, commanded by Major J. KAY, M.C. 2 days later, Major Kay was evacuated sick and Capt. A. DENHOLM, D.C.M., assumed command of No. 2 Company. Battalion H.Q. Officers were appointed as follows:-

Officer Commanding	Lieut.-Col. S.W. WATSON, D.S.O.
Second in Command	Major C.V. GRANTHAM, M.C.
Adjutant	Capt. L.G. FRANCIS, M.C.

On the day of its Organisation, viz. March 27th, the First Battalion, C.M.G.C., moved by way of CAMBLAIN L'ABBE to the Front S. of ARRAS, with the Battalion H.Q. at GOUVES. The first tour of the newly-formed Batteries in the Line began on the night March 29th/30th.

### **Second Bn., C.M.G.C.**

The 4 Companies, of the Second Divisional Machine Gun Battalion, viz. The 4th, 5th, 6th and 14th C.M.G. Companies, were officially embodied in the Second Battalion, C.M.G.C., on March 23rd. It was arranged that the 5th and 14th C.M.G. Companies should form No. 1 Company, under the new Organisation and that the 4th and 6th C.M.G. Companies should form No. 2 Company. Owing to the Tactical Situation at the time and to the threatened imminence of Active Operations, the G.O.C., Second Cdn. Division decided not actually to re-form existing Machine Gun Companies into 4-Battery Companies in the meantime. Accordingly, the 4 Machine Gun Companies of the Second Cdn. Division continued to operate as Units for tactical purposes until April 7th.

On this date, the Second Cdn. Division was holding the Line, under Orders of the VI Corps, from S. of the COJEUL RIVER, E. of BOISIEUX-St. MARC, to the Southern Slope of TELEGRAPH HILL. The D.M.G.C., Lieut.-Col. J.G. WEIR, M.C., had his H.Q. at BASSEUX. The re-organisation was carried out and the new Batteries and Companies were formed in the Line. According to the provision already made for the new Establishment No. 1 Company (5th and 14th C.M.G. Companies) was placed under Major J. BASEVI. No. 2 Company (4th and 6th C.M.G. Companies) was commanded by Major W.M. PEARCE. Battalion H.Q. Officers were appointed as follows:-

Officer Commanding  
Second in Command  
Adjutant

Lieut.-Col. J.G. WEIR, M.C.  
Major J.E. McCORKELL  
Capt. G.N. DOUGLAS, M.C.

### **Third Bn., C.M.G.C.**

The Third Battalion, C.M.G.C., was organized on March 23rd and 24th. At this time, the Third Cdn. Division was in the Line, holding the MERICOURT-AVION Section, and was daily expecting the German Attack which was eventually launched on March 28th, on the immediate Left from GAVRELLE to PUISIEUX. Machine Gun Companies were disposed in the Line and in Reserve with their respective Infantry Brigades. Lieut.-Col. MOORHOUSE, D.M.G.C., had his H.Q. at CHATEAU d'ACQ. It was under these conditions that Reorganization was carried out. On March 23rd. the 9th and 15th C.M.G. Companies were formed into 4 Batteries to compose No. 2 Company under Capt. J.C. HARTLEY, M.C., M.M. The 7th and 8th C.M.G. Companies were embodied in No. 1 Company Third Battalion, C.M.G.C., on the following day, March 24th. The Battalion was commanded by Lieut.-Col. W.N. MOORHOUSE, with Major A.M. McFAUL as Second-in-Command and Lieut. G.M. DOWNTON as Adjutant.

### **Fourth Bn., C.M.G.C.**

The 10th, 11th, 12th and 16th C.M.G. Companies composing the Fourth Canadian Division Machine Gun "Battalion" were reorganized on March 29th at SPRINGVALE CAMP, near ECURIE. Companies had been relieved in LENS, ST. EMILE and HILL 70 Sections night March 28th/29th and had proceeded by Motor Lorries, during the night, to SPRINGVALE CAMP. The D.M.G.C., Lieut.-Col. M.A. SCOTT, D.S.O., had his H.Q. at ECURIE. On March 29th, the 10th and 16th C.M.G. Companies were brought together to form No. 1 Company, Fourth Battalion, C.M.G.C., under Major J.C. BRITTON. No. 2 Company was composed of the 11th and 12th C.M.G. Companies and commanded by Major L.F. PEARCE, M.C. Lieut.-Col. M.A. SCOTT, D.S.O., was placed in command of the Battalion, Major E.W. SANSOM was appointed Second-in-Command, Capt. H. WARD, M.C., Adjutant. On the day following Reorganization, the Fourth Battalion, C.M.G.C., took over M.G. defences in the GAVRELLE and ARLEUX Sections, immediately N. of ARRAS.

### **Names of Officers.**

The names of Officers of the 4 newly-created Machine Gun Battalions are given below:-

Nominal Roll of Officers in the 4 M.G. Battalions – February 22nd, 1918.

#### **First Battalion, C.M.G.C.**

##### **Battalion Headquarters.**

Officer Commanding	Lieut.-Col. S.W. Watson
2nd in Command	Major C.V. Grantham, M.C.
Adjutant	Captain L.G. Francis
Quartermaster	Lieut. J. Wylie
Signalling Officer	Lieut. A.W. Beaumont
Medical Officer	Captain D.A. Morrison (C.A.M.C.)
Paymaster	Captain H.B. Woods (C.A.P.C.)

##### **Company Officers.**

Major J. Kay	Lieut. K.B. Hamilton	Lieut. J.A. McPherson
Captain G.C. Ferris	Lieut. E. Hancock	Lieut. W.B. Milner
Captain E.R. Morris	Lieut. W.B. Henry	Lieut. J.R.B. More
Lieut. D.S. Bankier	Lieut. G.B. Herridge	Lieut. R.H. Morris
Lieut. C.A. Battershill	Lieut. P.M. Humme	Lieut. A.F. Morris
Lieut. A.C. Bowles	Lieut. R.S. Jackson	Lieut. A.E. Parker
Lieut. E.V. Chambers	Lieut. S.R. Jefferess	Lieut. J.E. Ritchie
Lieut. V.R. Davies	Lieut. D.A. Macintosh	Lieut. J.E. Robinson
Lieut. J.A. Dewar	Lieut. J. Maitland	Lieut. C.D. Schwab
Lieut. M.M. Dillon	Lieut. H.W. Martin	Lieut. H. Shaughnessy
Lieut. C.C. Drew	Lieut. L. McEwan	Lieut. E.H. Strickland
Lieut. O.W. Fawcett	Lieut. A.C. MacFarlane	Lieut. C.G. Warner
Lieut. S.J. Freeman		

## **Second Battalion, C.M.G.C.**

### **Battalion Headquarters.**

Officer Commanding	Lieut.-Col. J.G. Weir
2nd in Command	
Adjutant	Captain G.N. Douglas
Quartermaster	Lieut. J. Stonehewer
Signalling Officer	
Medical Officer	
Paymaster	Captain T.D. Patterson

### **Company Officers.**

Major J. Basevi	Lieut. D.S. Jackson	Lieut. I.F. Price
Major J.H. McCorkell	Lieut. F. Layton	Lieut. J.A. Ramsay
Major W.M. Pearce	Lieut. I.G. MacLaren	Lieut. N.G. Richardson
Captain J.B. McCamus	Lieut. A.F. Mahaffy	Lieut. S.E. Sacks
Captain G.W.H. Millican	Lieut. H.A. McBurney	Lieut. H.S. Salisbury
Lieut. G.W. Comstock	Lieut. J.A. McCullough	Lieut. H.M. Sibbald
Lieut. P. Cowan	Lieut. R.M. McKenzie	Lieut. W.P. Tozer
Lieut. R. Edmunds	Lieut. F.L. Much	Lieut. C.W. Travis
Lieut. R. Fleming	Lieut. T.H. O'Rourke	Lieut. A.B. White
Lieut. C.G. Frost	Lieut. W.H. Patterson	Lieut. L.F. White
Lieut. G.E. Harley	Lieut. H.J.D. Pearce	Lieut. A.P. Williams
Lieut. G. Hobson		

## **Third Battalion, C.M.G.C.**

### **Battalion Headquarters.**

Officer Commanding	Major W.N. Moorhouse
2nd in Command	Major A.M. McFaul
Adjutant	Lieut. G.M. Downton
Quartermaster	Hon. Captain C.M. Hall <sup>58</sup>
Signalling Officer	
Medical Officer	
Paymaster	

### **Company Officers.**

Major A.J.R. Parkes	Lieut. G.F. Douglas, M.C.	Lieut. A.F. Neatby, MC, DCM
Captain F.W. Burnham	Lieut. A.G. Fisher	Lieut. P.W. Newman
Captain J.H. Clark	Lieut. J.B. Fraser	Lieut. F.A. Parkins
Captain K.E. Drinkwater	Lieut. S.C. Gee	Lieut. G.V. Rayner
Captain F.M. Carrison	Lieut. A.M. German	Lieut. R. Rothwell
Captain J.C. Hartley, MC, MM	Lieut. F.E. Hinds	Lieut. J.G. Searles, MC
Captain E.I.J. Ings	Lieut. R.M. Hopper	Lieut. G.R. Smith
Captain B.J. Mothersill	Lieut. C.K. Hulbert	Lieut. H.F. Smith
Captain D.W. Rowatt, MC	Lieut. W.J. Hutchens	Lieut. W.N. Smith <sup>59</sup>
Lieut. D.A. Blunden	Lieut. C.W. Kern	Lieut. E.G. Spalding
Lieut. B.L. Cook	Lieut. F.W. Landreth	Lieut. J. Thompson
Lieut. J.D. Clark	Lieut. A.R. Madgett	Lieut. C.W. Tubbs
Lieut. H.E.B. Coyne	Lieut. J.R. McLean	Lieut. A.H. Tudhope

## **Fourth Battalion, C.M.G.C.**

### **Battalion Headquarters.**

Officer Commanding	Lieut.-Col. M.A. Scott
2nd in Command	Major E.W. Sansom

---

<sup>58</sup> Attached Cdn. Corps Cyclist Bn.

<sup>59</sup> Attached 50th C.I.Bn.

Adjutant  
Quartermaster  
Signalling Officer  
Medical Officer  
Paymaster

Captain H. Ward, M.C.  
Captain K. Weaver  
Lieut. H.S. Moss  
Captain J.W. Laurie  
Captain T.W. Seagram

Company Officers.

Major J.C. Britton	Lieut. F.I. Carpenter	Lieut. H.O. Leach, MC
Major L.F. Pearce, MC	Lieut. G.E.W. Cook	Lieut. H. Lewis
Captain B.M. Clark, MC	Lieut. W.H. Duncan	Lieut. W.W.R. Mitchell
Captain H.A. Fowler	Lieut. O.B. Eaton	Lieut. H.A. Peverley, MC
Captain I.C. Hall, MC	Lieut. C.J.T. French	Lieut. M.P. Pope
Captain S. Johnston	Lieut. W.J.H. Gill	Lieut. J.A. Riddell
Captain H.T. Logan	Lieut. C.S. Grafton	Lieut. W. Riddell
Captain E.L. Rainboth, MC	Lieut. S.E. Gudgeon	Lieut. G.T. Roach
Captain A.G. Scott, MC	Lieut. C.J. Hearn	Lieut. C.J.S. Ryley
Captain W.G. Williams	Lieut. F.W. Hopper	Lieut. J.D. Sharp
Lieut. H.E. Anderson	Lieut. C.R. Hopper, MC	Lieut. W.J.A. Stewart
Lieut. F.W.G. Barber-Starkey	Lieut. J.T. Hughes	Lieut. E.J.L. Stinson
Lieut. A.L. Bourque, MC	Lieut. W.C. Killip	Lieut. C.A. Young
Lieut. E.S. Campbell	Lieut. G.E. Ladler	

\*\*\* insert Table Organization of Transport. C.M.G. Bn. (2 Coy) \*\*\*

### **XIII.**

#### **FINAL ORGANISATION: 3-COMPANY MACHINE GUN BATTALION. MAY 6th, 1918.**

The 4 Machine Gun Battalions of the Corps had scarcely completed their re-organisation on a 2-Company basis when each received a 50% addition to its Strength in Men and Guns in the form of a 3rd Company, and the Canadian Machine Gun Battalion assumed its final form.

##### **Chief Reason for Additional Company.**

The chief reason actuating this change was the sudden and unexpected success of the German Offensive. In order to withstand the effect of long range intense Artillery Fire accompanied by a determined Infantry Attack the necessity for a Machine Gun Defence in great depth and the possession of Divisional Machine Gun Reserves was realized as never before. The inadequacy of our Machine Gun Defences was accentuated at this time by reason of the enormous Frontage held by the Canadian Corps. The regrouping of the Forces following the German Attacks brought it about that the Corps was made responsible for twice the Frontage, normally assigned to it.

##### **Another Reason.**

The addition of Machine Gun Strength was also recommended by the fact that, as a result of the larger Infantry Establishment of a Canadian Division, the proportion of Machine Guns to Rifles in a Canadian Division was considerably below that of other Divisions of the British Army. In a British Division with 9 Battalions (9,000 Rifles), and 64 Vickers Guns the proportion was 1 Vickers Gun to 141 Rifles. In a Canadian Division with 12 Battalions (13,200 Rifles) and 64 Vickers Guns the proportion was 1 Vickers Gun to 206 Rifles. With the addition of 32 Guns per Division this proportion would be brought up to 1 Vickers Gun per 138 Rifles – not perceptibly greater than that obtaining in other Divisions of the British Army.

##### **Immediate Action taken by Corps Commander.**

On account of the need for immediate action and because much invaluable time must necessarily be consumed if formal approval were awaited from the Overseas Ministry, the Corps Commander decided to go on at once with the required addition to Machine Gun Strength.

Strong representations were made to General Headquarters as a result of which 128 Machine Guns and 20 Three-Ton Lorries were obtained. At the same time, on April 10th, a letter was addressed by the Corps Commander to the General Officers Commanding Divisions as follows:-<sup>60</sup>

“I propose to form immediately a third Machine Gun Company per Division. I shall not wait until such an organization is sanctioned by the Higher Authorities, but shall proceed immediately with the organization, if I can obtain the Guns, Official sanction can come later.”

“To do this I require 2400 men, and I propose that each Battalion be asked to give fifty of their best men who, for the time being will remain on command to the Machine Gun Corps. It is proposed to withdraw from the present Machine Gun Companies certain personnel, who will form the nucleus of the new Machine Gun Teams. The places of the men so withdrawn will be filled by men withdrawn from the Battalions as stated above, and who, in a very short time, will become expert Machine Gunners.”

“A short time ago the strength of each Battalion was increased by one hundred men, and in view of the increased Fire Power which the new Machine Gun Company in each Division will give, it is considered Battalions will be agreeable to allow these men to go. There are no trained Machine Gun reinforcements in England available at the present time, so that the organization suggested must be improvised from resources here.”

“I would like you to take this matter up with your Battalion Commanders at once. While no doubt they will dislike losing their men From the Infantry, I believe they will realize it is for the

---

<sup>60</sup> Headquarters, Canadian Corps, April 10th, 1918.

general good and I would ask you to urge upon them to ear-mark fifty of their best and brainiest men for the purpose outline above.”

### **Sources of Supply of Personnel.**

On April 12th detailed instructions were issued by Canadian Corps for the supply and Training of Personnel for the new Companies. Each Division supplied 12 Officers and 600 Other Ranks, withdrawn at the rate of 1 Officer and 50 Other Ranks per Battalion. The Canadian Corps Reinforcement Camp supplied 25 Officers. Transport Officers, Signal Sergeants, Signal Corporals, Signallers, Armourer Corporals, Saddlers and other Specialists were not provided initially but were later drawn, partly from the C.C.R.C., partly from the C.M.G.C.R.D. All Personnel found unsuitable for Machine Gun work were returned to their respective Units and immediately replaced by men likely to become Machine Gunners.

### **Transferred Officers.**

Among the Officers transferred in each Division were included one Major or Captain and 2 Lieutenants all three recommended for promotion. The remainder were Lieutenants; in all cases the date of Seniority was unaffected by the eventual transfer of these Officers to the Machine Gun Corps. The entire Personnel were attached to the Machine Gun Battalions of their respective Divisions pending authority for the new Organisation.

### **Training.**

Training of this new Personnel was carried out as follows. The 12 Officers in each Division, together with 392 out of the 600 Other Ranks joined the Machine Gun Battalions at once, and were trained in Machine Gun work under arrangements made by the Battalion Commanders concerned.

For the remaining 208 Other Ranks per Division a total of 832, and for the 25 Officers supplied by the C.C.R.C., a Special Machine Gun Training Depot was formed under the administrative command of Lieut.-Col. C.H. HILL, D.C.O., at Tank Camp, BOIS D'OHLAN near VERRELEL; the Instructional Staff was in charge of Captain M.R. LEVEY, M.M., assisted by 2 Officers and 45 Other Rank Instructors from the C.M.G.C.R.D. Machine Guns for training purposes were supplied by First Army Ordnance. After carrying on for 10 days at Tank Camp, the Depot moved to FRASER CAMP, BOIS DES AILLEUX, near MONT. ST. ELOY. Training was completed at GUISY CAMP, AUBIN-ST-VAAST, whither the Special Depot moved along with the C.M.G.C.R.D. on May 4th, and the Personnel joined their Battalions in the last week in May.

### **Guns and Lorries Received.**

On April 12th, the very day on which the instructions for Supply and Training of Personnel were published by Canadian Corps, 64 Machine Guns were drawn from Army Ordnance for the new Companies, and distributed by the C.M.G.O., 32 to the 1st Battalion, and 32 to the 4th Battalion. On April 13th, remaining 64 Vickers Guns were received and dispatched to the 2nd and 3rd M.G. Battalions. 20 Three-Ton Lorries arrived on the same date, and were sent 5 to each Battalion, as Transport for the new extemporized Companies.

### **Assimilation of Infantry Personnel.**

Organisation and intensive Training began at once within all the Machine Gun Battalions. Nucleus Crews of Trained Gunners were formed for the New Guns: these Crews were gradually built up as Personnel, Transferred from the Infantry, received sufficient Training to be made members of Gun Teams. These nucleus Crews with some attached Infantry Personnel, were sent into the Line, 2 Crews with each Half-Battery (4 Guns) and in this way the Corps Machine Gun Defences were immediately strengthened without lowering the efficiency of the Machine Gun Units. As the portion of the Line which the Corps was then holding was comparatively quite a good deal of Instructional Work could be carried out in the Line, under the supervision of Company Commanders.

### Revised Establishment Submitted.

By April 15th, these preliminary arrangements were completed and on the 16th, Lieut.-General CURRIE wrote to Canadian Headquarters in London<sup>61</sup>, stating what had been done and at the same time he submitted a revised Establishment for the approval of the Overseas Ministry.

### Additions to Establishment.

This Establishment provided for the addition of a Third Company exactly similar to those already existing. The addition of this Company necessitated a slight increase in the Administrative Staff and the following were added to Battalion Headquarters Establishment.

- 1 Assistant Adjutant
- 1 Assistant Quartermaster
- 2 Orderly Room Clerks
- 1 Postal Clerk
- 1 Quartermaster Corporal

Five Lorries were installed in the Establishment, 2 at Battalion Headquarters, Water Cart Trailers were to be used in conjunction with these instead of Water Carts drawn by Horses, and one at each Company Headquarters. It was argued that Lorries were not only economical as regards cost of maintenance compared with the Horse Transport replaced by them, but were also tactically essential, for they would “enable a Divisional Commander, in an emergency to move the Machine Gun Batteries in Divisional Reserve much more quickly than would be the case if Horses had to be used.” A Ford Car was provided for the Battalion Commander in lieu of a Riding Horse to enable him “efficiently to perform his duties” in and out of the Line.

### CANADIAN MACHINE GUN BATTALION

#### WAR ESTABLISHMENT

#### FINAL ORGANISATION – May 1st, 1918.

Detail	Personnel						Horses				Bicycles
	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	TOTAL	Riding	Light Draught	Heavy Draught	TOTAL	
Headquarters	7	2	3	1	21	34	5	3		8	
Headquarters, Attached	2		2		8	12	2			2	
3 Companies	54	15	114	24	1299	1506	30	297	12	339	24
3 Companies, Attached					6	6					
TOTAL BATTALION (excluding Attached)	61	17	117	25	1320	1540	35	300	12	347	24
TOTAL BATTALION (including Attached)	63	17	119	25	1334	1558	37	300	12	349	24

<sup>61</sup> Canadian Corps letter dated April 16th, 1918.

CANADIAN MACHINE GUN BATTALION  
WAR ESTABLISHMENT (continued)  
COMPOSITION IN DETAIL (i) Personnel & Horses.

Detail	Personnel						Horses			
	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	TOTAL	Riding	Light Draught	Heavy Draught	TOTAL
<b>HEADQUARTERS</b>										
Lieutenant-Colonel	1					1				
Major (2nd in Command)	1					1	1			1
Adjutant (Captain)	1					1	1			1
Assistant Adjutant (Lieut.)	1					1				
Quartermaster (Captain)	1					1	1			1
Asst. Quartermaster (Lieut.)	1					1	1			
Signalling Officer (Lieut.)	1					1	1			1
Battalion Sergeant-Major		1				1				
Battalion Q.M. Sergeant		1				1				
Armourer Staff-Sergeant				1		1				
Orderly Room Sergeant			1			1				
Pay Sergeant			1			1				
Mail Sergeant			1			1				
Orderly Room Corporal					1	1				
Quartermaster's Corporal					1	1				
Clerks					4 <sup>62</sup>	4				
Transport Corporal					1	1	1			1
Storeman					1	1				
Drivers					2	2		3		3
Cooks					2	2				
Batmen					7	7				
Water Details					1	1				
Shoemaker					1	1				
<b>TOTAL HEADQUARTERS</b> (excluding Attached)	7	2	3	1	21	34	5	3		8
<b>ATTACHED</b>										
C.A.M.C.	1		1		2 <sup>63</sup>	4	1			1
C.A.P.C.	1				1	2				
Veterinary			1			1	1			1
Drivers, C.A.S.C., M.T.					5	5				
Drivers, C.A.S.C (Train Transport)					6	6			12	12
<b>TOTAL HEADQUARTERS</b> (including Attached)	9	2	5	1	29	46	7	3		10

<sup>62</sup> Includes 1 Draughtsman.

<sup>63</sup> Includes 1 Corporal.



## CANADIAN MACHINE GUN BATTALION

## WAR ESTABLISHMENT (continued)

## COMPOSITION IN DETAIL.

Detail	Personnel					Horses				Bicycles
	Officers	Warrant Officers	S/Sergeants & Sergeants	Rank and File	TOTAL	Riding	Light Draught	Heavy Draught	TOTAL	
COMPANY HEADQUARTERS										
Major	1				1	1			1	
Transport Officer (Lieut.)	1				1	1			1	
Company Sergeant-Major		1			1					
Company Q.M. Sergeant			1		1					
Signal Sergeant			1		1					
Signal Corporal				1	1					
Signallers				20 <sup>64</sup>	20					8
Storemen				4 <sup>65</sup>	4					
Cooks				2	2					
Batmen				2	2					
Drivers, Short Rein				3	3		2	4	6	
Drivers, Long Rein				1	1		1		1	
Saddlers				2	2					
Water Details				2	2					
TOTAL COMPANY HEADQUARTERS (excluding Attached)	2	1	2	37	42	2	3	4	9	8
ATTACHED – Drivers, C.A.S.C.				2	2					
TOTAL COMPANY HEADQUARTERS (including Attached)	2	1	2	39	44	2	3	4	9	8

<sup>64</sup> 4 to be Lance-Corporals.<sup>65</sup> 1 to be attached to each Battery.

## CANADIAN MACHINE GUN BATTALION

## WAR ESTABLISHMENT (continued)

## COMPOSITION IN DETAIL.

Detail	Personnel						Horses				Bicycles
	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	TOTAL	Riding	Light Draught	Heavy Draught	TOTAL	
4 BATTERIES (Each)											
Captain	1					1	1			1	
Subaltern	3					3					
Battery Sergeant-Major		1				1				1	
Transport Sergeant			1			1	1				
Armourer Corporal				1		1					
Transport Corporal					1	1					
Shoeing-Smith				1		1					
Sergeants			8			8					
Corporals <sup>66</sup>					8	8					
Gunners					48	48					
Carriers <sup>67</sup>					24	24					
Cooks					2	2					
Batmen					4	4					
Drivers, Short Rein					12	12		24		24	
TOTAL BATTERY	4	1	9	2	99	115	2	24		26	
TOTAL COMPANY (excluding Attached)	18	5	38	8	433	502	10	99	4	113	8
TOTAL COMPANY (including Attached)	18	5	38	8	435	504	10	99	4	113	8

Notes: 1. 1 Sergeant per Battery will be trained in Gas Services.  
2. 1 Gunner per Crew to be trained as a Scout.

<sup>66</sup> Trained as Range-takers.

<sup>67</sup> Trained as Gunners.

CANADIAN MACHINE GUN BATTALION  
WAR ESTABLISHMENT (continued)  
COMPOSITION IN DETAIL.  
(ii) Transport.

	Vehicles	Drivers	Light Draught Horses	Heavy Draught Horses
<b>1st Line Transport</b>				
BATTALION HEADQUARTERS				
Motor Cars (Light)	1	1		
Lorries (3-Ton)	2	4 <sup>68</sup>		
Cart, Cooks'	1	1	1	
Cart, Water	1	1	2	
EACH COMPANY				
Field Kitchens	2	2		4
Cart, Cooks'	1	1	1	
Cart, Water	1	1	2	
Lorry (3-Ton)	1	2 <sup>68</sup>		
EACH BATTERY				
Wagon, G.S. Limbered, for Supplies	1	1	2	
Driver for Spare Draught Horses		1	2	
EACH SECTION				
Wagons, G.S. Limbered, for 4 Machine Guns, Tripods, Ammunition and 4 Ammunition Pack Saddles	2	4	8	
Wagon, G.S. Limbered, for Ammunition	1	1	2	
<b>Train Transport</b>				
G.S. Wagon, for Baggage and Supplies	6	6		12
	104	169	300	12

**3rd Company Authorized.**

On May 6th, word was received by the Corps Machine Gun Officer that these Amendments to Establishment had been approved with the exception of the Water Cart Trailers<sup>69</sup>, and re-organisation was at once proceeded with. By a fortunate co-incidence the Canadian Corps was relieved by the XVII and XVIII Corps on the same day and the 1st, 3rd and 4th Battalions were able to organize their 3rd Company in the quiet of Billets many kilometers from the Line. The Second Division was detached on duty with the VI Corps and remained in the Line until relieved by the 3rd Canadian Division on June 26th. In the 2nd Battalion therefore the Third Company had to be organized under Trench Warfare conditions.

**Officers.**

The following Officers were added to the various Battalions at this time, the majority on transfer from the Infantry:-

**1st Canadian Machine Gun Battalion.**

Major R. Murdie	Lieut. W.S. Carey
Captain L.N. Balfe	Lieut. E.E. Duley
Captain J.W. Maynard	Lieut. H.H. Essex
Captain A.D.C. McDermott	Lieut. W.R. Hamilton
Captain J. Skinner	Lieut. J. Hay
Lieut. V.C. Anderson	Lieut. W.A. Liddell
Lieut. L.R. Anrey	Lieut. H.M. Lovell
Lieut. A.C. Bowles	Lieut. W.B. McMullin
Lieut. R. Byrne	Lieut. J.R.B. More
Lieut. D.M. Campbell	Lieut. A.F. Wallace.

<sup>68</sup> C.A.S.C. M.T.

<sup>69</sup> Canadian Corps A.104-220 dated May 6th, 1918. A.G. (Cdn.) 7-1-177 dated May 2nd, 1918.

### **2nd Canadian Machine Gun Battalion.**

Major A. Graham	Lieut. St.G. Fildes
Lieut. C.H. Biddell	Lieut. F.J.G. Garneau
Lieut. C.W. Blair	Lieut. H.E. Hopkins
Lieut. J.R. Burchell	Lieut. W.J.H. Kreitzer
Lieut. A.H. Cameron	Lieut. A.G. Mercer
Lieut. A.C. Cleghorn	Lieut. A.D. Roughton
Lieut. H.A. Davis	Lieut. W.V. Smart
Lieut. T.H. Dudley	Lieut. A.R. Switzer.

### **3rd Canadian Machine Gun Battalion.**

Captain D.A. Galt, M.C.	Lieut. H.J. Godber
Lieut. A.A. Atkinson	Lieut. O.C. Hughes
Lieut. F.M. Bradbury	Lieut. K.R. Lindsay
Lieut. S.H. Brown	Lieut. P.C. Mulholland
Lieut. H.V. Copley	Lieut. L.A. Roe
Lieut. R.H. Foulds	Lieut. J.D. Shearer
Lieut. G.E. Garneau	Lieut. H.F. Smith
Lieut. H.E. Gee	Lieut. W.F. Tobey
	Lieut. R.H. Warne.

Attached – Honorary Captain E.F. Pinnington (Chaplain)

### **4th Canadian Machine Gun Battalion.**

Captain C.E. Bailey, MC, DSO	Lieut. H.S. Moss
Lieut. W.J.A. Fair	Lieut. C.R. Parsons
Lieut. W.J. Johnston	Lieut. J.H. Patterson
Lieut. K. Lorimer	Lieut. H.R. Simpson
Lieut. F.M. MacDonald	Lieut. J.M. Snetsinger
Lieut. D. McGillivray	Lieut. W.A. Woodward
Lieut. C.F. Mandel, MC	

\*\*\* Insert Diagram Battalion, Canadian Machine Gun Corps (Final Organization) \*\*\*

### **THE NEW ESTABLISHMENT TESTED; MAY 6TH, 1918, TO NOVEMBER 11TH, 1918.**

The Establishment granted at this time persisted without change down to the cessation of hostilities. Its adaptability for Defensive Operations, though undoubtedly supreme, was never put to the test, as the Germans did not attack on that part of the Front held by the Canadian Corps.

#### **Test in Offensive Operations.**

But the new Organisation was tested in the severest possible way during the Allied Offensive beginning August 8th. The Machine Gun reorganization coincided with Military requirements; the months of May, June and July were utilized for getting the Units into smooth running order. For two months of that period the Canadian Corp was at rest, in G.H.Q. Reserve and constant Training was done both in conjunction with the Infantry and in Technical Machine Gun work.

#### **Final Organisation Found Satisfactory.**

In the 1st week of August the Corps left the LENS-ARRAS area and proceeded to AMIENS. From the morning of August 8th, when the Allied Attack broke in fury upon the Germans, until hostilities ceased on November 11th, the Canadian Corps was continuously engaged. In the Battle of AMIENS, in the 2nd Battle of ARRAS, in the taking of the QUEANT-DROCOURT Line, in the crossing of the CANAL de NORD and subsequent CAMBRAI Fighting, in the capture of VALENCIENNES and last of all in the delivery of MONS Machine Gun Organisation along with all other Arms, was tested as never before. All the technical skill in the use of the Machine Guns, acquired in 4 years of fighting was called into action: every variety of Offensive Machine Gun Tactics was employed: even at this stage of the war a new use was found for Machine Guns, when they were sent forward in Tanks in front of our Infantry Attack to seize important points in rear of the Enemy. Every detail of Machine Gun Organisation was put to the supreme test of long-continued strenuous fighting: and whether in Tactics or Administration it is

generally admitted that the Machine Gun Work of the Corps had never before been so satisfactorily carried out.

### **Quality of Personnel.**

These Machine Gun successes were due to various causes. Not least of these was the quality of the Personnel composing the Corps: without men of intelligence and disciplined courage no Organisation could succeed.

Another factor which helped to make these achievements possible was the method of administration adopted by all fighting Units of the Corps. A Unit as large as a Machine Gun Battalion, with a total Strength of 1558 All ranks and several times as much Transport as an Infantry Battalion, required specially careful provision for administrative matters. A system of Orderly Room Administration and Interior Economy<sup>70</sup> was devised by Major W.B. FORSTER, M.C. Staff Officer to the Corps Machine Gun Officer. Major FORSTER visited each Machine Gun Battalion in turn, in the Summer of 1918, and superintended the introduction of this common system of Administration. In this was the handling of Orderly Room and "Q" Matters was made uniform and the smooth interior working of all Units was assured.

### **Elasticity of Unit.**

But the form of Organisation is a conspicuous cause of success or failure in all military enterprises and the Canadian Machine Gun Battalion was found in practice to be a Machine capable of undergoing the utmost trials of endurance with the maximum of ease and under all circumstances it was able to do the things required of it. The Battery proved itself as a perfect Tactical Unit as could be devised, ideal for co-operation with an Infantry Battalion, and of great mobility under conditions of Open Warfare. So efficiently did it serve its purpose that an 8-Gun Unit, modeled on the Canadian Machine Gun Battery is the basis of the Organisation recommended for the Post-War British Machine Gun Service.

---

<sup>70</sup> Published 1919 by Canadian Corps as "Canadian Machine Gun Corps Organisation, Administration and Duties." (Page and Thomas Ltd. 131, Finsbury Pavement, E.C.)

## **XIV.**

### **“NOTES FOR THE INFORMATION AND GUIDANCE OF ALL OFFICERS REGARDING THE ORGANISATION OF MACHINE GUN BATTALIONS AND THEIR EMPLOYMENT.”**

**ISSUED APRIL 30th, 1918.**

A circumstance which contributed very materially to the smooth working of Machine Gun Battalions in the Field was the publication by Canadian Corps of the document quoted in full here-under, setting forth the Principles of Employment of Machine Guns and the Duties of Machine Gun and Infantry Officers in relation to Machine Guns in Action. This Memorandum was prepared by General BRUTINEL and many of the questions with which it dealt had previously been wrapped in uncertainty and had been the cause of a great deal of misunderstanding between the Infantry and the Machine Gun Service. The questions of Command and Liaison with the Infantry are here set forth so clearly as to be place beyond dispute.

The Memorandum which was circulated to all officers of the Corps was as follows:-<sup>71</sup>

#### **I. Organisation.**

1. The organization of a Canadian Machine Gun Battalion is shown in the attached diagram. Appendix “A” (see Plate, p.141). It is commanded by the D.M.G.C. (see Appendix “C” for duties of this officer, page 174).  
The Battalion is the Unit for purposes of administration and training. The Training has been thus centralized to obtain uniformity in tactics and greater efficiency in technical training.
2. The Company has no administrative function. It is a convenient echelon for the co-ordination of the Machine Gun Batteries, the supervision of their tactical handling, and the maintenance of good liaison with the Infantry.
3. The Battery is essentially the tactical Unit, and will be the smallest Unit detailed for detachment to Infantry Brigades or Battalions. It is self-contained as regards Command, Transport, and Personnel except Signallers, who are with the H.Q. of the Company. The Composition of a Machine Gun Battery is shown on the attached diagram, appendix “B” (see Plate, p.141).
4. There is no similarity between Infantry Battalions and Machine Gun Battalions wither as regards administration or Tactics. A Machine Gun Battalion can be more closely compared to a Divisional Artillery both in its organization and in its Tactical distribution.

#### **II. Tactical Employment.**

1. The Machine Gun Service must be regarded as a distinctive Arm with Tactics of its own. In all respects it is intermediate between the Infantry and the Artillery, its Tactics being radically different from the former, and approximating to, but not being identical with, the Tactics of the latter.
2. It must be thoroughly realized that the principle governing the employment of Machine Gun Units is their duty to support the Infantry in all phases of the fight, and to co-operate constantly with them. But they are not part of the Infantry, and must not be considered as such. (S.S.192, Sec4, and “Note on Recent Fighting No. 3, para. 3.)
3. The methods of employing Machine Guns have been fully explained in S.S.192, part 1. This Book must be taken as a guide regarding the principles of Machine Gun Tactics.  
Attention is called to the fact that the Germans have adopted principles similar to our own regarding the employment of their heavy Machine Guns, and that the methods used in their advance are identical with those prescribed in Chap. 6 of S.S.192 part I (See 1.a/47875 appended to “Notes on Recent Fighting” No.3. and No.5.)

---

<sup>71</sup> Canadian Corps G.126/3-6 dated April 30th, 1918.

### III. Command.

1. Machine Gun Battalions are Divisional Troops and should be employed to support the Infantry in accordance with the plans of the G.O.C. Division.
2. In offensive operations it is often advisable for the dispositions and tasks of Machine Gun Units to be supervised by the C.M.G.C. in much the same manner as the Artillery is controlled by the G.O.C, R.A.
3. It is essential that, under all conditions, the Machine Gun Resources of a Division should be kept as fluid as possible, and that their distributions on the Divisional Front should be based solely on tactical considerations.
4. Special attention must be given to the engagement of Machine Gun Reserves and to their withdrawal and reconstitution as soon as the necessity for their employment has passed, to the maintenance of a constant forward flow of Machine Gun Personnel and material in battle, and to the necessity for re-distributing the Machine Guns to meet the larger changes in the situation which will arise in the course of a Battle. These considerations make it imperative for the Division to retain firm control of the Machine Guns, if the full value of these weapons is to be available when, and where, most required.
5. Control by the Division will always include arrangements regarding reliefs, and reinforcements of personnel and material, for which reason Officers Commanding Machine Gun Batteries must keep the D.M.G.C. constantly informed regarding orders received, movements of the Batteries, the condition of the Batteries, and the Tactical situation on their front. Such control by the Division, or Corps, will be exercised however without interfering with the tactical Command of Machine Gun Units which have been temporarily attached to Infantry Brigades or Battalions in accordance with the plan of operations of the G.O.C. Division. This immediate Tactical Command by Infantry Brigade or Battalion Commanders must be exercised through the O.C. Machine Gun Company or Batteries attached to them.
6. The D.M.G.C. will appoint an Officer to Command the Machine Guns attached to each Brigade. This Officer will usually be a Company Commander and will be responsible for co-ordinating the work of the Machine Gun Batteries attached to that Brigade in accordance with the plans of the G.O.C. Division or Brigade.
7. A Machine Gun Commander should be given definite orders by the Infantry Commander, to whom he is Tactically attached, as to what is required of him, but he should be allowed as much freedom of action as possible in carrying out these orders, and should be kept informed of all changes and developments of the situation which may affect his action. Initiative, enterprise, and complete knowledge of the Technique of the weapons, are essential to the effective handling of Machine Guns (See Section 160. Para 13-Infantry Training, 1914).

### IV. Liaison.

1. It is essential that good liaison be established and maintained between Machine Gun Commanders and Infantry Commanders, so that the most effective co-operation may be ensured at all times.
2. The Officer Commanding Machine Guns attached to a Brigade will establish his Headquarters at the H.Q. of the Infantry Brigade. If circumstances arise which make it necessary for him personally to leave the H.Q. of the Infantry Brigade he will detail an officer to act for him in his absence.
3. On relief of Machine Gun Batteries, or Infantry Brigades, the Machine Gun Commander will report fully to the Infantry Brigade Commander on the Machine Gun dispositions, including the state of the emplacements which are occupied, stores, ammunition, Section Headquarters, telephones and communications. He will also explain the progress of harassing fire in force and, if necessary, will ask for or suggest any modifications or alterations to it.
4. During the tour of duty in the Line, the Machine Gun Commander, working with the Brigade, and the Machine Gun Battery Commanders, will visit the Headquarters of Infantry Battalions immediately after reliefs and afterwards from time to time, to give Infantry Commanders full information regarding positions of Machine Guns, their tasks, etc. The further forward this liaison can be established the better, since many cases of misunderstanding, apparent lack of action at opportune moments, and other causes of friction can thus be eliminated.

5. When Machine Guns are organized for the purpose of applying local barrage fire for offensive or defensive purposes, the Officer Commanding Machine Guns should get in touch with the Infantry covered.
6. In a moving battle the importance of liaison is greatly increased. On it depends the regulation of the alternative advances of Infantry and Machine Gun Units, the opportune application of Machine Gun fire to support the Infantry, and, in extreme cases, the reinforcement of the firing line by Machine Guns to obtain definite superiority of fire over the enemy.

In a retirement the definite stopping power of Machine Guns should be utilized by Infantry Commander to the utmost. Infantry instinctively reform under cover of fire from the Machine Gun Batteries, which are the natural rallying points for them. But, under the conditions which make such action necessary, it is not likely that the Machine Gun personnel will be available to make the liaison: therefore all Infantry Commanders, whatever their rank, should be impressed with the necessity of initiating and maintaining liaison with the Machine Guns in such circumstances.

7. At all times Officers Commanding Machine Gun Units should be constantly on the alert to seize any opportunity of assisting the Infantry and of inflicting losses on the enemy. Machine Gun Officers must be thoroughly in touch with all matters affecting their front, and it is the duty of Infantry Commanders to keep them informed of all changes and developments of the situation which may affect their section. (See Section III, para. 6)
8. It is the duty of the Commander of an Infantry force to arrange automatically for the protection, particularly of the flanks, of any Machine Gun Units which are co-operating with him, and, in consultation with the Machine Gun Commander, to make definite arrangements for any advance, counter attack, or other tactical manoeuvre.

#### V. Communications.

1. The number of signallers available in a Canadian Machine Gun Battalion is sufficient to allow communication to be established and maintained, by telephone or visual, between the Machine Gun Batteries and the Headquarters Machine Gun Company or Group Commander, as the case may be, forward of the Headquarters of Infantry Brigades in the Line.
2. Communication between the Headquarters Machine Gun Company, or Group Commander, and the D.M.G.C. will be obtained through the Infantry Brigade exchange, or visual station.
3. Allotments of lines in buried cable routes will be obtained by the C.M.G. Battalion Signalling Officer through the O.C., Divisional Signal Company (A.D. Signals, S.1087/16-3 dated 14-4-18.)
4. In semi-open warfare many difficulties will be experienced but every effort must be made to re-establish communication between Headquarters Machine Gun Batteries, and Headquarters Machine Gun Company, as soon as possible after any interruption. Runners will be used very sparingly, and only on important occasions, when other means of communication fail.

#### VI. Training.

1. Technical training should be carried out all the time, whether in or out of the Line. It should be understood that the efficiency of Machine Gunners must be measured by their ability to prepare their guns for action, to rapidly select and occupy favourable positions, to open fire according to orders, and to maintain that fire as long as the situation demands.
2. The training of all ranks in indirect fire should be developed to, and maintained at the highest possible standard. It should be kept in mind that when we resume the offensive, our Machine Gun resources on the frontage which would probably be allotted to a Corps will permit the development of a dense and powerful overhead supporting fire, when required, and will also allow Machine Gun Batteries to be moved forward in alternate bounds. This overhead supporting fire may be, at times, the only support available for the Infantry, and it is essential that the training in indirect fire should be maintained at the highest degree of efficiency. The technically perfect execution of the daily programme of harassing fire is the best method of training now practicable.



3. Training in indication and recognition of targets, and in direct fire-control of Machine Gun Batteries, is of very great importance, and must be practiced on the Machine Gun Long Ranges, disappearing targets being used for this purpose.

These practices should invariably include overhead direct fire with graticules, in which Infantry will be represented by panels, as well as overhead indirect fire applied on a local feature representing a strong point. At least four N.C.O.'s in each Battery should be thoroughly trained in the use of the Range Finder.

4. The tactical principles and methods of employment of Machine Guns in defensive trench warfare, and in set piece offensive operations, are well known, and need not be repeated. (See Chapters 1, 2, & 3, S.S.192. Part I.)
5. D.M.G.C.'s must strongly impress on all their subordinates, and particularly on the Battery Commanders, the vital importance of initiative, good judgement, and ruthless energy and driving power.

It must be realized that highly organized trench warfare has checked rather than developed the qualities of initiative, leadership, and self-reliance on the part of subordinate commanders. Recent operations, which have been operations of movement rather than of position, have demonstrated the great importance of such qualities.

Tactical exercise on the ground, dealing with open fighting, are the best method of developing these qualities in all ranks, and should be carried out in conjunction with Infantry Battalions or Brigades whenever possible. The range practices, laid down above, must be made the means of further developing quick and accurate judgement and action.

6. During tactical exercises all ranks must be practiced in assuming the duties of their superiors. This is of vital importance and it must be thoroughly impressed on all ranks that, no matter what the casualties among the senior commanders may be, the spirit and determination to carry out their allotted task must remain to the last survivor of the unit.
7. The organization of Transport, by Limber or Pack Animals, must be practiced in the Companies and Battalions, under the personal supervision of the Battalion Commanders or Seconds in Command; it being understood by all ranks that the pressing forward of ammunition and supplies is essential if the Machine Gun Batteries are to be kept in action.

In a moving battle the tactical handling of limbers or of pack animals is of great importance. Boldness, use of ground, and common sense will often enable Machine Gun Batteries to come into action quickly by using limbers or pack animals.

8. The Notes on Recent Fighting published up to date emphasize the value of certain principles which are applicable to a moving battle. The essential points to be studied and applied in all training are:-
  - (a) Machine Guns are employed apart from the Infantry.
  - (b) Under certain circumstances, and to a certain extent, Machine Guns replace Artillery.
  - (c) Machine Guns must be distributed in depth, must be able to intervene in the fight by opening fire rapidly to a flank, even when advancing, and must be the main protection against the enemy's counter-attacks.
  - (d) Machine Guns follow the waves of the attacking Infantry, advancing in alternate sections by large bounds, making every use of the ground, and taking up positions from which overhead or flanking fire can be brought to bear on the enemy.
  - (e) The aim of the Machine Gun Commanders at all times must be the production of the greatest possible fire power at those points where the hostile infantry is fighting most vigorously, so as to assist the progress of our infantry in the attack by bold and opportune action.
  - (f) In the moving battle the Machine Guns should be so disposed and so handled that the largest possible number will automatically intervene by fire at any point where our Infantry is held up being attracted, as it were, by the localities where our Infantry meets the greatest resistance.

- (g) The engagement of this Machine Guns in Reserve, Brigade or Divisional, should be governed by the tactical situation and the urgency of breaking definitely the resistance of the enemy at certain points.

**Duties of D.M.G.C.<sup>72</sup>**

Under normal conditions the D.M.G.C. will make his Headquarters with the Machine Gun Battalion. Too much of his time should not be absorbed by Staff work, and in this connection his subordinates should be used freely for minor reconnaissance, etc. At the same time he must keep in close touch with the tactical situation and should report frequently to the General Staff of the Division.

Arrangements should be made by the General Staff for the D.M.G.C. to have access to all tactical papers of instructional value, together with orders, instructions and correspondence which either directly or indirectly affect Machine Guns.

The services of the D.M.G.C. are available as required by the Administrative Staff in dealing with all matters affecting personnel, establishments, and equipment of Machine Gun Units.

During active operations the D.M.G.C., with a suitable proportion of his Headquarters Staff, must be located at the Headquarters of the Division.

The principle duties of the D.M.G.C. are:-

- (a) To administer and command the Machine Gun Battalion.
- (b) To direct the tactical action of the Machine Gun Battalion Batteries under his command, in accordance with the orders of the G.O.C. Division and in close co-operation with the other Arms.
- (c) To be responsible for arranging and carrying out reliefs of Machine Gun Batteries, and for the maintenance of Strength, both in personnel and material, of the Machine Gun Batteries in the line.
- (d) To advise the Divisional Commander regarding the distribution and employment of the Machine Gun resources of the Division in relation to the tactical situation,
- (e) To prepare for the approval of the G.O.C. the plan of operations for the Machine Guns of the Division, both in Offence and Defence and to co-ordinate these plans with those of the Divisions on either flank.
- (f) To be responsible for keeping Infantry Brigades in the line informed as to the disposition of the Machine Guns covering their respective sectors, and to ensure that close and constant liaison is maintained between Infantry and Machine Gun Units.
- (g) To supervise on behalf of the G.O.C. the carrying out of the instructions regarding Machine Gun Units both in offence and defence and to ensure continuity and method in the siting and construction of Machine Gun Emplacements in the Divisional Area.

---

<sup>72</sup> Published as Appendix "C" to above Memorandum.

## **XV.**

### **REORGANISATION OF MOTOR MACHINE GUN UNITS: FORMATION OF 2 CANADIAN MOTOR MACHINE GUN BRIGADES.**

**DECEMBER 25th, 1917, TO MAY 31st, 1918.**

#### **INTRODUCTORY.**

##### **Reconstitution of Motor Branch.**

Although the organisation of the Machine Gun Corps, Motor Branch, remained unaltered during 16 months of strenuous activity, it was found by experience in the Field to be quite unsatisfactory. And while the reorganization of the Infantry Branch and the formation of the Machine Gun Battalions was taking place an effort was also being made to reconstitute the Motor Machine Gun Units. The effort was not productive of its ultimate object until after the development of the Infantry Branch was completed: the final form of the Machine Gun Battalion was authorized on May 6th, 1918: the new Motor Machine Gun Organisation was not sanctioned until May 31st.

##### **Stages of Reorganization.**

An account of the re-organisation of the Motor Branch falls naturally into three distinct parts. (a) In the first place application was made for the reconstitution of the existing Motor Machine Gun Units into a single Brigade. This followed (b) a request for the formation of a 2nd Motor Machine Gun Brigade from the 3 Machine Gun Companies of the 5th Division. Neither of these aims were achieved as originally intended. What eventually happened was (c) the formation of 2 Motor Machine Gun Brigades by combining in each Brigade elements of the existing Motor Machine Gun Units with the untrained elements of the Fifth Division Companies absorbed in the Canadian Corps.

#### **APPLICATION FOR FORMATION OF A 5-BATTERY MOTOR MACHINE GUN BRIGADE.**

##### **New Establishment Suggested.**

On December 25th, 1917, the day on which the 2-Company Machine Gun Battalion Establishment was draughted the Corps Machine Gun Officer also forwarded to the Corps Commander a suggested new Motor Machine Gun Establishment.

##### **Reasons for Proposed Change.**

The then existing condition of the Motor Branch and the reasons for this proposed change were enumerated in Lieut.-Colonel BRUTINEL's covering letter:

"The Motor Branch, Canadian Machine Gun Corps, consisting at present of 4 administrative Units, namely:-

The 1st Motor Machine Gun Brigade  
The Borden Motor Machine Gun Battery  
The Eaton Motor Machine Gun Battery  
The Yukon Motor Machine Gun Battery"

"The 1st Motor Machine Gun Brigade consists of 1 Headquarters, 2 Batteries, 1 Train."

"The 2 Batteries consist each of 8 Machine Guns and 2 Machine Guns carried as Spares."

"The Borden, Eaton, and Yukon Motor Machine Gun Batteries are 6 Machine Gun Batteries, substantially with the same Establishment as the British Motor Machine Gun Batteries (Clyno Side-Cars, Cycles)."

"The Motor Machine Gun Brigade and the Motor Cycle Batteries, have been grouped together under the O.C., Motor Machine Gun Brigade, and are looked upon more or less as a Unit."

"Unfortunately the diversity of Motor Equipment and the unreliability of the Clyno Side-Car offer such drawbacks that this Unit is neither cohesive nor mobile."

“The upkeep is costly, the Establishment inadequate, and the supply of specially qualified Personnel is becoming rapidly difficult.”

“The Personnel of the 3 Cycle Batteries must be recruited amongst qualified mechanics, since practically every man on the strength must be a trained Motor Cyclist, able to effect running repairs, as well as a Machine Gunner.”

“It is a matter of general interest to reduce as far as possible the casualties in highly trained mechanics.”

“As regards the Motor Machine Gun Brigade, the Armoured Lorries are obsolete, and are no longer suitable for ‘Action mounted.’ They are merely transport rendered cumbersome by the Armour.”

### **The Canadian M.M.G. Brigade.**

The amended Establishments submitted under the C.M.G.O.’s letter provided for the formation of a single administrative Unit to be known as “The Canadian Motor Machine Gun Brigade,” to consist of 1 Headquarters, 2 Machine Gun Batteries, of 8 Guns each, and 1 Brigade Train, a total Personnel of 499, All Ranks. Under this Establishment the Batteries which were then of unequal Strength and Guns, and were diversely equipped, would be equalized and their Equipment standardized.

### **Proposed Establishments.**

The amended Establishments, covering Personnel and Transport were as follows:-

#### CANADIAN MOTOR MACHINE GUN BRIGADE WAR ESTABLISHMENT.

Detail	Lieut.-Colonel	Major	Captains	Lieutenants	Warrant Officers Class I	Warrant Officers Class II	S/Sergeants & Sergeants	Corporals	Privates	TOTAL	Motor Cars	Ford Motor Cars	Mobile <sup>73</sup> Workshop <sup>74</sup>	Men's Transport Auto-car Lorries	3-cwt. Lorries Amm'n. Transport	15-cwt. Box Cars Baggage Sundries	Motor Cycles	Water Cart Trailers
HEADQUARTERS	1	1	2		1		2	1	21	29	1				1	1	5	
5 BATTERIES (8 M.G.s each)			5	15		5	20	25	350	420		5		20	10	10	40	
TRAIN			1	1		2	3	5	38	50		1	1		4	5	5	2
	1	1	8	16	1	7	25	31	409	499	1	6	1	20	15	16	50	2

<sup>73</sup> Attached.

<sup>74</sup> Unit complete.

# CANADIAN MOTOR MACHINE GUN BRIGADE

## WAR ESTABLISHMENT. (continued)

Detail	Personnel									Transport						
	Lieut.-Colonel	Major	Captains	Lieutenants	Warrant Officers Class I	S/Sergeants & Sergeants	Corporals	Privates	TOTAL	Motor Cars	Ford Motor Cars	Mobile Workshop	Men's Transport Auto-Car Lorries	30-cwt. Lorries Amm'n. Transport	15-cwt. Box Cars Baggage Sundries	Motor Cycles
HEADQUARTERS	1								1							
O.C. Brigade		1							1							
2nd in Command									1							
Adjutant			1						1							
Medical Officer <sup>75</sup>			1		1				1							
Bde. Sergt.-Major									1							
Provost Sergeant						1			1							
Orderly Room Clerk						1			1							
Mail Clerk							1		1							
Privates								2	2							
Drivers								3	3	1				1	1	
Assistant Drivers								1	1							5
Motor Cyclists <sup>76</sup>								5	5							
Cooks								1	1							
Batmen								4	4							
Water Details <sup>77</sup>								6	6							
	1	1	2		1	2	1	22	30	1				1	1	5

<sup>75</sup> Attached.

<sup>76</sup> To be trained Signallers.

<sup>77</sup> 1 Detached to each Battery H.Q.

# CANADIAN MOTOR MACHINE GUN BRIGADE

## WAR ESTABLISHMENT (continued)

### COMPOSITION IN DETAIL.

Detail	Personnel									Transport							
	Lieut.-Colonel	Major	Captain	Lieutenants	Warrant Officers Class I	Warrant Officers Class II	S/Sergeants & Sergeants	Corporals	Privates	TOTAL	Motor Cars	Ford Motor Cars	Mobile W' shop	Men's Transport Auto-Car Lorries <sup>78</sup>	30-cwt. Lorries Amm'n. Transport	15-cwt. Box Cars Baggage Sundries	Motor Cycles
BATTERY O.C. Battery Subaltern Battery Sergt.-Major N.C.O.s Gunners Drivers Motor Cyclists <sup>79</sup> Cook Batmen			1	3		1	4	5	48 9 8 1 4	1 3 1 9 48 9 8 1 4		1		4	2	2	8
			1	3		1	4	5	70	84		1		4	2	2	8

<sup>78</sup> To transport 2 M.G. Detachments each.

<sup>79</sup> To be trained as Signallers.

# CANADIAN MOTOR MACHINE GUN BRIGADE

## WAR ESTABLISHMENT (continued)

### COMPOSITION IN DETAIL.

Detail	Personnel									Transport								
	Lieut.-Colonel	Major	Captain	Lieutenant	Warrant Officer Class I	Warrant Officer Class II	S/Sergeants & Sergeants	Corporals	Privates	TOTAL	Motor Cars	Ford Motor Cars	Mobile Workshop	Men's Transport Auto-Car Lorries	30-cwt. Lorries Amm'n. Transport	15-cwt. Box Cars Baggage Sundries	Motor Cycles	Ware Cart Trailers
TRAIN			1	1		1	1	5	5	1								
O.C. Train									1	1								
Q.M. & Paymaster									1	1								
Sergeant-Major						1			1	1								
Q.M. Sergeant							1		1	1								
Armourer Sergeant							2	5	7	1								
N.C.O.s									7	7								
Fitters									5	5								
Armourers									2	2								
Privates									6	6								
Drivers									11	11	1	1 <sup>81</sup>			4	5		2
Asst. Drivers									5	5								
Motor Cyclists <sup>80</sup>									5	5							5	
Cobbler									1	1								
Cook									1	1								
Batmen									2	2								
			1	1		2	3	5	38	50		1	1		4	5	5	2

### Main Features.

Some of the points specially recommending this Establishment were set forth by the Corps Machine Gun Officer.

“This re-organisation will give 5 Machine Gun Batteries of equal size and great mobility, and the Canadian Motor Machine Gun Brigade will be a well-balanced Unit with a greatly enhanced tactical value.”

“The cost of upkeep will be greatly decreased by the elimination of the Clyno Motor-Cycles.”

“As regards personnel, the Machine Gunners will not be required to be skilled mechanics.”

“The Motor Drivers and the other skilled Mechanics will not be more exposed to become casualties than the Specialists of a Machine Gun Unit of the Infantry Branch.”

The importance of the point is emphasized by the fact that A and B Batteries of the Motor Machine Gun Brigade have suffered about 140% casualties in the last 5 months without the Unit being crippled. Should the Casualties have occurred amongst the Motor Cycle Batteries great difficulty would have been experienced in obtaining sufficient specially-trained reinforcements.”

### Designation of Batteries.

In order to retain the identity of the donors or the original names of the Units, all of which had been offered fully equipped to the Canadian Government, the following designations were suggested:

A – (M.M.C.B.) Battery.

B – (M.M.C.B.) Battery.

<sup>80</sup> To be trained as Signallers.

<sup>81</sup> Attached.

- C – (Borden) Battery.
- D – (Eaton) Battery.
- E – (Yukon) Battery.

The Batteries grouped under the Officer Commanding the 1st Motor Machine Gun Brigade had actually been designated as above, A, B, C, D, and E, respectively, ever since the formation of the Group in 1916.<sup>82</sup>

#### Differences between Existing and Proposed Establishment.

The following tables indicate at a glance the numerical differences in Personnel and Transport between the existing and proposed Establishments.

	Lieut.-Colonel	Major	Captains	Medical Officer Att'd	Lieutenants	W.O. Class I	W.O. Class II	Sergeants	Corporals	L/Corporals	Privates	Water Details	TOTAL
Proposed Establishment (The Canadian Motor M.G. Brigade)	1	1	7	1	16	1	7	25	31		403	6	499
Existing Establishment (1st C.M.M.G.Bde. and 3 Attd. Batteries)	1	1	6	1	13	1	3	21	23	3	277	2	352
Increase			1		3		4	4	8		126	4	150
Decrease										3			3

TRANSPORT	Motor Cars	Ford Cars	Auto-Cars	30 Cwt. Lorries	15 Cwt. Box Cars (Napiers)	Travelling Workshops	Clyno Side-Cars	Motor Cycles Solo	Push Cycles
Proposed Establishment (The Canadian Motor M.G. Brigade)	1	6	20	15	16	1		50	
Existing Establishment (1st C.M.M.G. Bde and 3 Attached Batteries)	1	6	20	3	12		66	32	12
Increase		6		12	4	1		18	
Decrease							66		12

#### Proposal for Reorganization Forwarded.

The proposed new Organisation was forwarded by the Corps Commander, Lieut.-General Sir ARTHUR CURRIE, on January 10th, 1918, with a strong covering letter, in which he wrote:-

“The value of Machine Gun Units operating under Corps Headquarters was demonstrated in the PASSCHENDAELE Operations, but the weak points of the present organization were also clearly shown.”

“The Motor Machine Gun Units as at present organized are not only not satisfactory from the tactical point of view, as pointed out by the C.M.G.O., but (a greater disadvantage) required to

<sup>82</sup> See Page 35.



be reinforced by Specialist tradesmen trained as Machine Gunners. This means that reinforcement becomes increasingly difficult and alone makes reorganization desirable.”

“The adoption of the draft Establishments forwarded herewith is, I consider, essential in order:-

1. To provide a homogeneous and mobile Unit.
2. To make reinforcement possible.”

#### **Establishment Not Authorized.**

This Establishment was never actually authorized as the Motor Machine Gun Branch of the Corps was increased and reorganized on the basis of another Establishment before this application of the Corps Commander had been dealt with.

#### **APPLICATION FOR FORMATION OF 2ND CANADIAN MOTOR MACHINE GUN BRIGADE. FEBRUARY 19th, 1918.**

#### **Corps Commander recommends Formation of 2nd Brigade.**

On February 19th, 1918, three days before the authorization of the 2-Company Machine Gun Battalion, the Corps Commander recommended to the Honourable the Minister, Overseas Military Forces of Canada at Argyll House, London,<sup>83</sup> “that the 3 Machine Gun Companies of the 5th Canadian Division be reorganised under the name of the ‘2nd Canadian Motor Machine Gun Brigade,’ and provided with Motor Transport similarly, and on approximately the same scale as the pending Establishment of the 1st Canadian Motor Machine Gun Brigade now in the field.”

#### **Reason.**

The reason for this request as stated by the Corps Commander was “to enable the Canadian Corps to retain approximately the former proportion of Machine Guns to Rifles” – a proportion which had been temporarily reduced by the increase of strength of Infantry Battalions.

#### **Proportion of Machine Guns to Rifles.**

The serious deficiencies of a Canadian Division in this respect at the time is shown by the following Memorandum showing the proportion of Machine Guns to Rifles in some of the various Forces in the Field. For the purpose of this Memorandum the approximate Strength only of Infantry Battalions is considered.

Formation	Approximate Strength	No. of Machine Guns Heavy Pattern.	Proportion of Machine Guns to Rifles
French Division	9 Battalions 9000 Rifles	108	1 to 83
British Division	9 Battalions 9000 Rifles	64	1 to 141
Canadian Division	12 Battalions 13,200 Rifles	64	1 to 206
German Division	9 Battalions 9000 Rifles	144 <sup>84</sup>	1 to 62.5

Even after the addition of the 2nd Motor Machine Gun Brigade, as applied for, the Canadian Corps would still be 40 Guns short of the number required to make its proportion of Machine Guns to Rifles equal to that prevailing in the other Infantry Formations of the British Army.

---

<sup>83</sup> C.C. G.645/1-23, M.G. 60/ dated 19-2-18.

<sup>84</sup> Including a Marksman Detachment.

### **Comparative Cost.**

The possible objection that this was an expensive form in which to mobilize the 48 Machine Guns of the 5th Division for Service in France had been anticipated.

“Careful comparisons were made between the organization of the Machine Gun Companies of the 5th Canadian Division organized on Battalion basis, in accordance with the new Establishments, but with 48 Machine Guns only, and the same Companies organized as Motor Units.”

“This comparison shows that the organization of the Companies in Motor Units results in a saving of Personnel of 237 All Ranks, equivalent to a saving in money exceeding 500 dollars a day for pay and upkeep of Personnel only.”

“The cost of running expenses and maintenance is also greatly in favour of Motor Units.”

### **New Establishment Submitted.**

An Establishment was submitted by the Corps Commander, with the above recommendation, providing for the organisation of 1 Headquarters, 6 Eight-Gun Batteries, and Train, a total Personnel of 593 All Ranks, with Motor Transport, except that 2 additional 30 cwt. Lorries for the transport of Spare Parts, Stores, etc., were recommended in place of a Mobile Workshop with the Trains, as it was considered that “the Mobile Workshop recommended in the pending Establishment of the 1st C.M.M.G. Brigade” would be “sufficient for the maintenance of the aggregate Transport of the two Brigades.” In order to bring the Strength of the 3 Machine Gun Companies up to that proposed Brigade Organisation only 29 All Ranks were required from outside sources.

### **Immediate Formation Urged.**

Sir ARTHUR CURRIE urged “in view of the lateness of the season, and the expected severity of the coming fighting, that the new Machine Gun Unit should be made available at the earliest possible date.”

### **G.H.Q.’s Sanction requested.**

The sanction of G.H.Q. for this change in organisation and accompanying increase of the Machine Gun strength of the Canadian Corps was applied for in the ordinary course<sup>85</sup>, at the same time as the above recommendations were submitted to the Overseas Minister.

## **FORMATION OF 2 MOTOR MACHINE GUN BRIGADES – 5th DIVISION M.G. COMPANIES.**

### **C.M.G.O.’s Conference with London Authorities.**

In the last week of February the Corps Machine Gun Officer was sent to England on duty “with a view to dealing with all outstanding questions regarding the Canadian Machine Gun Corps.” On March 4th, Lieutenant-General Sir RICHARD TURNER, V.C., stated to Lieut.-Col. BRUTINEL in the course of an interview that it had been decided to send the 5th Division Machine Gun Companies to France at once. Brigadier-General S. McDONALD, also present, was requested by General TURNER to go into the question of Establishments for the new Motor Units, in conference with the C.M.G.O. All Establishment was drawn up at this time for 2 Motor Machine Gun Brigades of 8 Eight-Gun Batteries, each. In view of the urgency of the situation, on the return of the C.M.G.O. to France application was made by Canadian Corps for authority to proceed with the organisation of the Brigades.<sup>86</sup>

### **1st Motor Brigade is Attached to Fifth Army.**

A week after this application was forwarded, on March 21st, the last great Offensive attempted by the Germans began. The 1st Canadian Motor Machine Gun Brigade received Orders on the 22nd to join the Fifth Army and left VIMY RIDGE Area for AMIENS in the early morning of the 23rd. Re-organisation had to be postponed indefinitely until the 1st Brigade should return to the Canadian Corps.

---

<sup>85</sup> C.C. G.616/1-23, M.G. 60/dated 18-2-18.

<sup>86</sup> C.C. A.104-220 dated March 14th, 1918.

### **5th Division Companies Proceed to France.**

Meanwhile, the 17th, 18th and 19th Machine Gun Companies were hurriedly got together at WITLEY CAMP, SURREY and sent at once to France. They landed at LE HAVRE on the 25th and proceeded immediately by Lorry to the Camp at VERDREL.

Their Horse Transport made the journey by road in its own time. In view of the critical and urgent tactical situation and to facilitate tactical handling, the three Companies were temporarily Brigaded, under Major B.M. Clerk, M.C., as "Canadian Corps Machine Gun Companies." Each Company was formed into 2 Eight-Gun Batteries; each Battery was placed under the Command of an Officer with experience in the Field.

### **Officers with the 17th, 18th and 19th Companies.**

The undermentioned Officers came to France with the 5th Division Companies:-

#### **17th Canadian Machine Gun Company.**

Captain G. Black (O.C.)	Lieut. J.F. MacLennan
Captain G.G. Hulme	Lieut. W. Murray
Lieut. R.W. Chipman	Lieut. W.G. Radford
Lieut. E.M.C. Goodwin	Lieut. N.A. Watt
Lieut. W. Leary, M.C.	Lieut. P.S. Wilson

#### **18th Canadian Machine Gun Company.**

Captain G.W. de la P. Beresford (O.C.)	Lieut. W.J. Preston
Major A.W.L. Butler	Lieut. F.W. Thompson
Lieut. F. Adam	Lieut. J.E. Tudhope
Lieut. W.E. Frame	Lieut. M.B. Watts
Lieut. H. Norwick	Lieut. F.F. Worthington

#### **19th Canadian Machine Gun Company.**

Major J.H. Brownlee (O.C.)	Lieut. W. Macintyre
Captain J.McC. Cumming	Lieut. J.H. Morwick
Lieut. G.C. Anderson	Lieut. S.G. Rennie
Lieut. F.J. Buck	Lieut. M.M. Robinson
Lieut. L.W. Dinnie	Lieut. A.H. Wylie

### **"Canadian Corps M.G. Companies" First Tour in the Line.**

This reserve of Machine Gun Strength was not allowed to remain in idleness at such a critical time. They received their first experience in Trench Fighting at once. All three Companies, on completion of their temporary reorganization, were sent into the Line to relieve Machine Gun Units in need of rest. In order not to weaken the Machine Gun defences of the Corps, the new Units were diluted and not put into a special portion of the Front as entire Companies. Sub-sections (2 Guns each) of the "Canadian Corps Machine Gun Companies" relieved corresponding elements of experienced Machine Gun Units, along the whole Corps Front. In this way a useful Training, under fighting conditions, was given the newly-arrived Companies and, at the same time 48 Machine Guns were released to Divisional and Corps Reserve.

### **1st Brigade Returned to Canadian Corps.**

On April 10th, the 1st Motor Machine Gun Brigade returned to VERDREL from AMIENS and proceeded to reorganize after the losses of a fortnight's constant, rigorous fighting.

### **Formation of 2 Brigades.**

Following the decision arrived at in March in the conference of the C.M.G.O. with the London Authorities, arrangements were now got under way for the formation of 2 Brigades each of 8 Eight-Gun Batteries.

### **Change of Plan; Final Organisation.**

On May 4th, however, word was received that the new Establishment had been approved providing for 2 Brigades of 5 Eight-Gun Batteries each, and the reorganization was proceeded with at once on this basis pending actual receipt of authority.

### **Personnel.**

During the month of May Other Ranks, Gunners and Specialists required to complete the new Establishments were transferred from the C.C.R.C. Divisional Wings, to the Canadian Machine Gun Corps Reinforcement Depot (C.M.G.C.R.D.) and their Training proceeded with. They were sent to the new Brigades as required.

### **Establishment.**

Authorization of the Organisation was contained in G.H.Q. letter O.B./1964 dated May 31st, 1918, sanctioning the 2 Motor Machine Gun Brigades and 1 M.T. Company, with the Establishments as follows:-

#### **CANADIAN MOTOR MACHINE GUN BRIGADE**

#### **WAR ESTABLISHMENT**

No. 1449 – dated July 8th, 1918.

Detail	Personnel					Transport	
	Officers	Warrant Officers	S/Sergeants & Sergeants	Rank and File	TOTAL	Motor Cycles	Water Cart Trailer
HEADQUARTERS	5	2	6	19	32	6	
HEADQUARTERS (Attached)	1		1		2		
5 BATTERIES	26	5	25	330 <sup>87</sup>	380	40	
TRAIN		1	3	14	18	5	2
TOTAL BRIGADE (excluding Attached)	25	8	34	363	430	51	2
TOTAL BRIGADE (including Attached)	26	8	35	363	432	51	2

---

<sup>87</sup> Includes 30 Corporals.

# CANADIAN MOTOR MACHINE GUN BRIGADE

## WAR ESTABLISHMENT (continued)

### COMPOSITION IN DETAIL.

#### (i) Personnel & Transport.

Detail	Personnel					Transport	
	Officers	Warrant Officers	S/Sergeants & Sergeants	Rank and File	TOTAL	Motor Cycles	Water Cart Trailers
<b>BRIGADE HEADQUARTERS</b>							
Lieutenant-Colonel	1				1		
Major (2nd in Command)	1				1		
Adjutant (Captain)	1				1		
Quartermaster (Captain)	1				1		
Signalling Officer (Lieut.)	1				1	1	
Brigade Sergt.-Major (Class I)		1			1		
Brigade Q.M. Sergeant (Class II)		1			1		
Provost Sergeant			1		1		
Orderly Room Sergeant			1		1		
Pay Clerk			1		1		
Mail Clerk			1		1		
Motor Cyclist Signallers			2	3	5	5	
Privates				3 <sup>88</sup>	3		
Cook				1	1		
Batmen				6	6		
Water Details				6 <sup>89</sup>	6		
<b>TOTAL HEADQUARTERS</b> (excluding Attached)	5	2	6	19	32	6	
<b>ATTACHED</b>							
C.A.M.C. (Captain)	1				1		
C.A.M.C. (Sergeant)			1		1		
<b>TOTAL HEADQUARTERS</b> (including Attached)	6	2	7	19	34	6	

<sup>88</sup> Includes 1 Lance-Corporal, Storeman.

<sup>89</sup> 1 attached to each Battery.

# CANADIAN MOTOR MACHINE GUN BRIGADE

## WAR ESTABLISHMENT (continued)

### COMPOSITION IN DETAIL.

Detail	Personnel					Transport	
	Officers	Warrant Officers	S/Sergeants & Sergeants	Rank and File	TOTAL	Motor Cycles	Water Cart Trailers
5 BATTERIES (Each)							
Captain	1				1		
Subalterns	3				3		
Battery Sergt.-Major (Class II).		1			1		
Sergeants			5		5		
Corporals				5	5		
Gunners				48	48		
Motor Cyclist Signallers				8 <sup>90</sup>	8	8	
Cook				1	1		
Batmen				4	4		
TOTAL	4	1	5	66	76	8	

## CANADIAN MOTOR MACHINE GUN M.T. COMPANY, C.A.S.C.

For Two 5-Battery Brigades (H.Q. & 2 Sections).

### WAR ESTABLISHMENT.

	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	TOTAL
HEADQUARTERS	3	2	3	39	32	79
TWO SECTIONS	2		2		188	192
TOTAL	5	2	5	39	220	271
Personnel for Attached Vehicles other than TRAIN					8	8
TRAIN PERSONNEL	2		2		36	40
TOTAL	7	2	7	39	264	319

<sup>90</sup> Includes 1 Corporal.

CANADIAN MOTOR MACHINE GUN M.T. COMPANY, C.A.S.C.

For Two 5-Battery Brigades (H.Q. & 2 Sections).

WAR ESTABLISHMENT (continued)

COMPOSITION IN DETAIL. (i) Personnel.

	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	TOTAL
HEADQUARTERS						
Major	1					1
Captains	2 <sup>92</sup>					2
Warrant Officer (Class I)		1				1
Company Sergeant-Major		1				1
Company Q.M. Sergeant			1			1
Sergeants			2			2
Corporals					1	1
Drivers – Motor Box Car					4 <sup>93</sup>	4
Lorries					12 <sup>94</sup>	12
Motor Cycles					1	1
Spare 15%					10 <sup>95</sup>	10
Batmen					4	4
Workshop <sup>91</sup> – Foremen (S/Sgts)				3		3
Fitters & Turners				22		22
Blacksmiths				6		6
Wheelers				6		6
Electricians				2		2
TOTAL	3	2	3	39	32	79

<sup>91</sup> Includes 6 Sergeants and 6 Corporals.

<sup>92</sup> 1 for Workshop.

<sup>93</sup> Includes 1 Driver for M.C. for G.O.C. C.M.G.C.

<sup>94</sup> Includes 1 Driver for each Workshop and Store Lorry.

<sup>95</sup> Includes 15% Spares for all attached vehicles.

CANADIAN MOTOR MACHINE GUN M.T. COMPANY, C.A.S.C.

For Two 5-Battery Brigades (H.Q. & 2 Sections).

WAR ESTABLISHMENT (continued)

COMPOSITION IN DETAIL.

	Officers	Warrant Officers	S/Sergeants & Sergeants	Artificers	Rank and File	TOTAL
ATTACHED to each M.M.G. BRIGADE HEADQUARTERS. Drivers, Motor Box Cars Drivers, for Lorries					2 2	2 2
TOTAL					4	4
ATTACHED for each TRAIN M.M.G. BRIGADE Subalterns Clerk Drivers, Motor & Box Cars Drivers for Lorries Batman	1		1 <sup>96</sup>		7 10 <sup>97</sup> 1	1 1 7 10 1
TOTAL	1		1		18	20

---

<sup>96</sup> 1 Supply Sergeant.

<sup>97</sup> Includes 2 Corporals.



CANADIAN MOTOR MACHINE GUN M.T. COMPANY, C.A.S.C.

For Two 5-Battery Brigades (H.Q. & 2 Sections).

WAR ESTABLISHMENT (continued)

COMPOSITION IN DETAIL.

	Officers	Warrant Officers	S/Sergeants & Sergeants	Rank and File	TOTAL
DETAIL for SECTION					
Subaltern	1				1
Sergeant			1		1
Corporals				6	6
Drivers <sup>98</sup> – Lorries				60	60
Motor & Box Cars				15	15
Spares 15%				12	12
Batmen				1	1
	1		1	94	96

---

<sup>98</sup> Includes 5 Lance-Corporals.

**CANADIAN MOTOR MACHINE GUN M.T. COMPANY, C.A.S.C.**

For Two 5-Battery Brigades (H.Q. & 2 Sections).

**WAR ESTABLISHMENT (continued)**

**COMPOSITION IN DETAIL.**

(ii) Transport.

(a) M.T. COMPANY HEADQUARTERS.

Detail	Motor Cars	Box Cars	Motor Cycles	30-cwt. Lorries	3-Ton Lorries	Workshop Lorries	Store Lorries	Drivers
For Personnel	2 <sup>99</sup>		1					2
For General Transport		2			3 <sup>100</sup>	3	3	14
For Intercommunication			1					1
	2	2	2		3	3	3	17

(b) ATTACHED FOR EACH M.M.G. BRIGADE.

For Personnel	1							1
For General Transport		5		2	3			15
For Intercommunication			1					1
	1	5	1	2	3			17

(c) ATTACHED FOR EACH M.M.G. SECTION.

For Personnel			1					
For Transport & Personnel				20				40
For Ammunition					10			20
For General Transport		10						10
		10	1	20	10			70

**Composition of 2 Brigades.**

The 2 Motor Brigades were composed as under:-

1st Canadian Motor Machine Gun Brigade.

1st C.M.M.G. Brigade – (A & B Batteries)

Borden M.M.G. Battery

18th C.M.G. Company

2nd Canadian Motor Machine Gun Brigade.

Eaton M.M.G. Battery

Yukon M.M.G. Battery

17th C.M.G. Company

19th C.M.G. Company

**Transport.**

The 1st Brigade was completed in Transport first, the 18th Company exchanging its Horse Transport for the Motor Transport of the Eaton and Yukon Batteries. Reorganization of Personnel was completed on June 8th, 1918. And Transport for 2 Brigades and M.T. Company was completed on July 10th. The

<sup>99</sup> Includes 1 Motor Car for G.O.C. C.M.G.C.

<sup>100</sup> Includes 2 First Aid Lorries.

Horse Transport thus released was partly distributed among the newly enlarged Machine Gun Battalions, the remainder was returned to the H.T. Depot.

## Officers.

The following Officers were serving with the Motor Machine Gun Brigades on Reorganization:-

### 1st Canadian M.M.G. Brigade.

Commanding Officer	Lieut.-Col. W.K. Walker, D.S.O., M.C.
Second in Command	Major B.O. Hooper, M.C.
Adjutant	Captain W.W. Main
Quartermaster	Captain F.P. O'Reilly, M.C.
Medical Officer	Captain R.D. Orck
	Captain G.W.D. Beresford
	Captain A.W.L. Butler
	Captain R.C. Clark
	Captain R.F. Inch, M.C.
	Captain W.T. Trench
	Lieut. F.N. Adam
	Lieut. H.R.E. Dye
	Lieut. W.G. Frame
	Lieut. J.E. Hipwell
	Lieut. W.A. Montgomery
	Lieut. H. Morwick
	Lieut. J.M. Peebles
	Lieut. W.J. Preston
	Lieut. H. Smith, M.M.
	Lieut. T.A. Smith
	Lieut. W.H. Smith
	Lieut. R.M. Thompson
	Lieut. C. Thorburn
	Lieut. J.E. Tudhope
	Lieut. D.R. Vosburg
	Lieut. F.F. Worthington, M.M.

Attached (Supernumerary):

Lieut. S.V. Hargreaves, (C.M.G.C.R.D.)

### 2nd Canadian M.M.G. Brigade.

Commanding Officer	Major W.J.A. Lalor, M.C.
Second in Command	Major H.F.V. Meurling, M.C.
Adjutant	Captain J.McC. Cumming
Quartermaster	Captain G.G. Hulme
Medical Officer	Captain R.C. Weldon
	Captain G. Black
	Captain J.H. Brownlee
	Captain W.J. Campbell, M.C.
	Captain W. Leary, M.C.
	Captain F.W. Thompson, M.M.
	Lieut. G.C. Anderson
	Lieut. L.M. Black, M.C.
	Lieut. F.J. Buck
	Lieut. R.W. Chipman
	Lieut. M.H. Doig
	Lieut. E.M.C. Goodwin
	Lieut. F.A. Landrian
	Lieut. W. Macintyre
	Lieut. J.A. MacKinnon
	Lieut. J.F. MacLennan
	Lieut. J.H. Morwick
	Lieut. W.G. Radford

Lieut. S.G. Rennie  
Lieut. W.H. Roberts  
Lieut. J.D. Seton  
Lieut. A.H. Wylie

Attached (Supernumerary):

Lieut. M.M. Robinson, (C.M.G.C.R.D.)  
Lieut. P.S. Wilson, (C.M.G.C.R.D.)

## XVI.

### FORMATION OF CANADIAN CORPS MACHINE GUN SCHOOL.

**May 6th, 1918.**

#### **Instruction April and May 1918.**

During the months of April and May, 1918, normal Machine Gun Instruction Work had been suspended. The Machine Gun Wing, Canadian Corps School had an existence on paper only during this period, as no Courses were conducted by it after the end of March. (See p.123) Special arrangements were made for the Instruction of Infantry men newly-transferred to the Machine Gun Service. (See pp.142 & 153).

#### **New Policy.**

When the first menace of the German Offensive was past, the Corps Machine Gun Officer took steps to re-establish the Machine Gun School on a permanent basis. A vigorous Instructions Policy was more necessary than ever because of the large increase of Machine Gun Corps Personnel consequent upon the new Battalion Establishment.

#### **Establishment Secured.**

On April 28th, application was made for an increase of Staff and an authorized Establishment for the School. The members of the Instructional Staff of the Machine Gun Wing, Canadian Corps School, viz., 2 Officers and 2 N.C.O.'s had been taken out of the Bombing Branch of the School; there was no definite Machine Gun Establishment. The work of the Bombing and Trench Mortar School had been taken over recently by the Divisional Wings of the C.C.R.C., but the Establishment, consisting of 5 Officers and 22 Other ranks had not been withdrawn. General BRUTINEL applied for this Establishment and on May 6th, the Bombing and Trench Mortar School was placed under his control, to be known as the Canadian Corps Machine Gun School.

#### **Establishment.**

The Establishment was as follows:

DETAIL	Officers	Warrant Off. Class II	S/Sgts. & Sergts.	Rank & File	TOTAL
Chief Instructor (Captain)	1				1
Instructors	4				4
Acting Sergt.-Major		1			1
N.C.O. Instructors			8		8
Privates				8 <sup>101</sup>	8
Batmen				5	5
Total School	5	1	8	13	27

#### **Administration.**

Administrative duties were allowed for in the Corps Infantry School Establishment.

#### **School Organized.**

The Organisation of the Machine Gun School was undertaken at once. Captain M.R. LEVEY, M.M., appointed Chief Instructor, was already at AUBIN-ST-VAAST, to which place the Corps Infantry School

---

<sup>101</sup> 2 Storemen; 6 Tange Duties.

had moved in April. When the Special Machine Gun Depot, of which Captain LEVEY had charge, (See p.153) was absorbed in the C.M.G.C.R.D. on May 28th, he was instructed to arrange for the commencement of work under the new M.G. School establishment.

#### **Increased Attendance.**

The principles of Selection and Training of Candidates remained unaltered. (See p.107). The increase in Staff made it possible to increase the Students. The number attending each Course were raised from 18 Officers, 36 Other Ranks, to 24 Officers, 80 Other Ranks, a total of 104, All Ranks. Courses lasted for one Month. The first Course began on June 5th, 1918, and the work of the School was continued without interruption down to the Armistice.

In the month of August Capt. J.E. RITCHIE took over command of the School from Capt. LEVEY who was attached as Staff Learner to C.M.G.C. Headquarters.

#### **Vickers Handbook.**

In order to make uniform Instruction in the Vickers Gun, a full detail, compiled by Captain Levey, containing the order and exact Method of Teaching at the School, was circulated to all Units of the Canadian Machine Gun Corps. This material was later published as "The Vickers Light Automatic Machine Gun – Canadian Machine Gun Corps."

#### **Influence of School.**

The Machine Gun School had very much to do with maintaining that high state of efficiency which marked the Machine Gun Corps. Those who attended it were fresh from Active Service in the Line with a full knowledge of conditions there, and the School served as a Clearing House for ideas gained in the Line experience of Different Units. It also taught a sound knowledge of Machine Gun Theory, as well as of General Military Subjects; and the Officers and N.C.O.s who attended Courses, on returning to their Units, communicated this knowledge to their own Men.

The thorough Course of Instructions, so brilliantly designed and so ably carried out at the Canadian Corps Machine Gun School by Captain LEVEY, under the C.M.G.O.'s direction, contributed very largely to the Esprit de Corps and Discipline of the Canadian Machine Gun Corps, and was in no small measure responsible for its success in the Field.

## **XVII.**

### **FORMATION OF MACHINE GUN WING, CANADIAN CORPS REINFORCEMENT CAMP.**

**JUNE 10th, 1918.**

While the Battalions had been undergoing changes in Establishment to render them more adaptable to the needs of the service, the C.M.G.C.R.D. had also been altered to meet the new requirements. The final form of its Organisation was officially sanctioned on June 10th.

#### **M.G. Wing C.C.R.C.**

On May 27th, 1918, the Infantry and Motor Branches moved to GUISEY CAMP AUBIN-ST-VAAST, where both came under orders of the Commandant, C.M.G.C.R.D. A request was at once made by General BRUTINEL<sup>102</sup> to have the two Branches amalgamated. There was no longer a necessity for Special Training of Motor Machine Gun reinforcements. Under the Establishment just granted to the 2 Motor Machine Gun Brigades a Canadian Motor Machine Gun, Motor Transport Company was authorized and this Unit would care for the Motor Specialist Personnel within its own Establishment. The amalgamation was approved and the 2 Branches became one Depot as from June 10th. The Depot was now known as the "Machine Gun Wing, Canadian Corps Reinforcement Camp."<sup>103</sup>

#### **Increase of Reinforcements.**

Meantime the numbers of Reinforcements to be maintained had been increased. The new Canadian Machine Gun Battalion Establishment adopted in February, had increased the numbers of Machine Gunners in each Division by 290 All Ranks. Following the introduction of this Establishment and to maintain the Proportion of Reinforcements to Strength of Units, the Scale of Personnel of Officers, Specialists and Gunners for Machine Gun Battalion Reinforcements at the Canadian Machine Gun Reinforcement Depot was increased on March 11th to:

Officers	Other Ranks
34	400

#### **Infantry Reinforcements, Specially Transferred to C.M.G.C.**

At the same time there was a falling off of Reinforcements available in England for the Machine Gun Service, and it was found that no Machine Gun Reinforcements could be expected from England for the months of April and May. In order to meet this situation, in view of the critical Military position, at the time, the Corps Commander, at the end of March, sanctioned the Transfer, to the Machine Gun Corps, of 500 Other Ranks from the Infantry Reinforcements at the Canadian Corps Reinforcement Camp.

#### **Training of Transferred Reinforcements.**

As the Machine Gun School had just been dissolved<sup>104</sup> owing to the German Offensive in the South, Captain M.R. Levey was free to take charge of the Machine Gun Training of these Men. The first batch of Reinforcements were drawn on March 30th and assembled at the Canadian Corps School, PERNES, where Captain Levey, assisted by 1 Officer and 14 Other Ranks, proceeded with Training. These were specially brilliant Men, and after a fortnight's Training were absorbed in the C.M.G.R.D. at DIVION.

#### **Final Increase in Reinforcements.**

The Strength of the Machine Gun Wing received its final authorized increase on June 26th. With the formation of 3-Company Machine Gun Battalions and the addition of the 2nd M.M.G. Brigade a further

---

<sup>102</sup> Canadian Corps M.G. 25-5/82 dated 6-6-18.

<sup>103</sup> Canadian Corps A. 104-280 dated 13-6-18.

<sup>104</sup> See Page 123.

addition to Reinforcements maintained in the Field was found necessary. The Scale of Officers and Other Ranks was fixed at:

	Officers	Other Ranks.
Infantry Personnel	62	859
Motor Personnel	26	259
TOTAL	88	1118

No change was made in the Cavalry Branch.

#### **M.G. Depot, CAMIERS.**

During the Summer of 1918, very few Infantry and Motor Machine Gun Reinforcements were maintained at CAMIERS. It became the practice for these to proceed direct to the Machine Gun Wing, AUBIN-ST-VAAST.

#### **Establishment.**

On June 15th, an Establishment was submitted for the Machine Gun Wing, C.C.R.C., providing for 1 Headquarters, 2 Infantry Training Companies and 1 Motor Training Company, a Total Strength of 14 Officers and 98 Other Ranks. This Establishment authorized<sup>105</sup> on November 1st, was as follows:-

#### **MACHINE GUN WING, CANADIAN CORPS REINFORCEMENT CAMP.**

War Establishment.

#### (i) PERSONNEL.

Detail	Lt.-Col. or Major	Major or Captain	Captains	Captains or Lieutenants	Lieutenants	Warrant Officers	S/Sergts. & Sergts.	Rank and File	TOTAL
Headquarters	1	1	1	2		2	5	34	46
2 Inf. M.G. Trg. Coys.			2		4	2	8	32	48
1 Motor M.G. Trg. Coy.			1		2	1	2	12	18
TOTAL	1	1	4	2	6	5	15	78	112

<sup>105</sup> A.G.3.d. A.G. 7-1-182 dated 9-11-18.



## COMPOSITION IN DETAIL.

## HEADQUARTERS.

Detail	Lt.-Col. or Major	Major or Captain	Captains	Captains or Lieutenants	Lieutenants	Warrant Officers	S/Sergts. & Sergts.	Rank and File	TOTAL
Commandant	1								1
Chief Instructor		1							1
Adj. & Record Officer			1						1
Quartermaster				1					1
Range Officer				1					1
R.S.M. (W.O. Class II)						1			1
Qr. Mr. Sergt. (W.O. Class II)						1			1
Sgt. I/c Records							1 <sup>106</sup>		1
Orderly Room Sergt.							1		1
Pay Sergt.							1		1
Pioneer Sergt.							1		1
Armourer Sergt.							1		1
Clerks								3	3
Storemen								2 <sup>107</sup>	2
Signallers								6	6
Cooks								2	2
Pioneers								5	5
Batmen								5	5
Details								11 <sup>108</sup>	11
TOTAL HEADQUARTERS	1	1	1	2		2	5	34	46

## COMPOSITION IN DETAIL (continued).

## INFANTRY MACHINE GUN TRAINING COMPANY.

	Lt.-Col. or Major	Major or Captain	Captains	Captains or Lieutenants	Lieutenants	Warrant Officers	S/Sergts. & Sergts.	Rank and File	TOTAL
Company Commander			1						1
Battery Commander					2				2
C.S.M.						1 <sup>109</sup>			1
Instructors							4 <sup>110</sup>	8 <sup>111</sup>	12
Storemen								1	1
Cooks								2	2
Tailor								1	1
Shoemaker								1	1
Batmen								3	3
Total Inf. M.G. Trg. Coy.			1		2	1	4	16	24

<sup>106</sup> Staff Sergeant.<sup>107</sup> Includes 1 L/Cpl.<sup>108</sup> Includes Buglers, Shoemaker, Tailor, Canteen and Range Duties.<sup>109</sup> W.O. II.<sup>110</sup> To be Staff Sgts.<sup>111</sup> To be Corporals.

COMPOSITION IN DETAIL (continued).  
MOTOR MACHINE GUN TRAINING COMPANY.

	Lt.-Col. or Major	Major or Captain	Captains	Captains or Lieutenants	Lieutenants	Warrant Officers	S/Sergts. & Sergts.	Rank and File	TOTAL
Company Commander			1		2	1 <sup>112</sup>	2 <sup>113</sup>	4 <sup>114</sup>	1
Battery Commander									2
C.S.M.									1
Instructors									6
Storemen								1	1
Cooks								2	2
Tailor								1	1
Shoemaker								1	1
Batmen								3	3
Total M.M.G. Trg. Coy.			1		2	1	2	12	18

TRANSPORT.

Detail	Vehicles	Drivers	Draught	Horses and Mules Heavy Draught Pack Mules
Wagons, G.S.	2	2		4
Carts, Water	2	2	4	
TOTAL	4	4	4	4

**Casualties; Call on Reinforcements.**

The heavy fighting from August 8th onwards, with the Casualties involved, put a severe strain upon the Machine Gun reinforcing arrangements. Between August 8th and October 16th, Canadian Machine Gun Casualties amounted to:

Officers	Other Ranks
136	2734

On October 16th, the Reinforcements at the Machine Gun Wing were exhausted, and there were available in England only sufficient Personnel of Trained, Partially Trained and Untrained Machine Gunners to bring the Units in the Field up to Strength.

All this Personnel was sent to France for disposal.

**Arrangements in England and Canada.**

When the Armistice came arrangements were under way to fill the Depot in England to a Strength of 3000 Other ranks having 10 weeks Infantry Training. It was also arranged between the Canadian Authorities in England and Canada for a supply of Reinforcements already ear-marked in Canada for Machine Gun Service Overseas. But the Armistice put an end to further developments.

---

<sup>112</sup> W.O.II.

<sup>113</sup> To be Staff Sergts.

<sup>114</sup> To be Corporals.

## **XVIII.**

### **CONCLUSION.**

#### **Growth of Canadian Machine Gun Corps.**

The amazing growth of the Canadian Machine Gun Corps may be illustrated by a comparison of Canadian Machine Gun establishments in the Field at various periods of the War. The following Table shows the Establishment Strength in Machine Gun Personnel of

- (1) The First Canadian Division on June 21st, 1915, i.e. prior to the Arrival in France of the Second Canadian Division and the Formation of the Canadian Corps.
- (2) The Canadian Corps on March 31st, 1917, immediately before the formation of the Canadian Machine Gun Corps; and
- (3) The Canadian Corps on November 11th, 1918, when the Canadian Machine Gun Corps had assumed its final form:-

	Officers	Other Ranks	TOTAL All Ranks
June 21st, 1915	24	567	591
March 31st, 1917	182	3192	3374
November 11th, 1918	422	8349	8771

\*\*\* Insert Diagram "Organization of Cdn. M.G. Corps 11-11-1918" \*\*\*

The Total for June 21st, 1915, is Composed of the Personnel of Infantry Battalion Machine Gun Sections (with Brigade Machine Gun Officers) and of the 1st C.M.M.G. Brigade. The Total for March 31st, 1917, is composed of the Machine Gun Companies and the 1st C.M.M.G. Brigade with attached Batteries. The Total for November 11th, 1918, includes the Establishment Strength of all Units making up the Canadian Machine Gun Corps, as shown on the accompanying Diagram.

#### **NOMINAL ROLL OF OFFICERS.**

##### **Names of Officers.**

The names of Officers in the various Units comprising the Canadian Machine Gun Corps on November 11th, 1918, are given below:-

##### **C.M.G.C. HEADQUARTERS STAFF.**

Brigadier-General R. Brutinel, C.B., C.M.G., D.S.O.  
Major W.B. Forster, M.C.  
Captain J.K. Lawson  
Captain M.R. Levey, M.M.  
Lieut. P.M. Humme

##### **FIRST BATTALION, CANADIAN MACHINE GUN CORPS.**

Officer Commanding	Lieut.-Col. S.W. Watson, C.M.G., D.S.O.
Second in Command	Major R. Murdie, D.S.O.
Adjutant	Captain L.G. Francis, M.C.
Assistant Adjutant	Lieut. J.A.B. Reilly
Quartermaster	Captain J. Wylie
Assistant Q.M.	Lieut. H.V. Chown
Signalling Officer	Lieut. G.M. Smith
Medical Officer	Captain J.M. Livingston
Paymaster	Captain H.B. Wood

Major A. Denholm, D.C.M.	Lieut. C.C. Drew	Lieut. H.W. Martin, M.C.
Major C.V. Grantham, M.C.	Lieut. E.E. Duley, M.M.	Lieut. W. McClellan
Major E.H. Morris, D.S.O.	Lieut. O.A.W. Fawcett	Lieut. L. McEwan
Capt. E.V. Chambers, M.C.	Lieut. S.J. Freeman	Lieut. W.B. McMullan, M.C.
Capt. H. Donald, M.C.	Lieut. E.V. Frith	Lieut. A.M. Miller

Capt. H.K. Jordan	Lieut. E.P. Gillespie	Lieut. J.R.B. More
Capt. J. Maitland, M.C.	Lieut. C.M. Graham	Lieut. N. Neil
Capt. R.W. Mathews, M.C.	Lieut. M.S. Haas	Lieut. W. Nye, D.C.M.
Capt. J.W. Maynard	Lieut. W.R. Hamilton	Lieut. H.E. Palmer
Capt. W.B. Milner	Lieut. W.D.P. Hardisty	Lieut. H.C. Rawlings
Capt. A.E. Parker, M.C.	Lieut. H.J. Harris	Lieut. R.R. Rennison
Capt. J. Skinner	Lieut. S. Harrison, M.C.	Lieut. C.D. Schwab
Capt. C.G. Warner, M.C.	Lieut. T.B. Heney	Lieut. C. Simpson
Lieut. L.N. Balfe, M.C.	Lieut. W.B. Henry	Lieut. W.J. Spears
Lieut. W.G. Cairns	Lieut. G.B. Herridge	Lieut. A. Stalker
Lieut. R. Cullen	Lieut. S.H. Jefferess	Lieut. R. Stevenson
Lieut. V.R. Davies	Lieut. J.P. Knox	Lieut. J. Stewart
Lieut. M.M. Dillon, M.C.	Lieut. J.L. Lawler	Lieut. W.V.B. Webb
Lieut. B.A. Doiron, M.C.	Lieut. H.M. Lovell	Lieut. R.G. Whitelaw

### **SECOND BATTALION, CANADIAN MACHINE GUN CORPS.**

Officer Commanding	Major E.W. Sansom	
Second in Command	Major A. Graham	
Adjutant	Capt. G.N. Douglas, M.C.	
Assistant Adjutant	Lieut. S.G. Fildes	
Quartermaster	Lieut. E.B. Underwood, M.C., D.C.M.	
Assistant Q.M.	Lieut. A.P. Williams	
Signalling Officer	Lieut. S.E. Sacks, M.C.	
Medical Officer	Capt. C. Sutherland	
Paymaster	Lieut. W.A. Fowler	
Major J. Basevi, D.S.O.	Lieut. G.H.K. Bingham	Lieut. J. Ketchum
Major J.A. McCamus, M.C.	Lieut. C.W. Blair, M.C.	Lieut. F. Layton
Major J.E. McCorkell	Lieut. F.R. Bolton	Lieut. R.M. Mackenzie
Capt. H.A. Creighton	Lieut. W.G. Broadbridge	Lieut. I.G. MacLaren, M.C.
Capt. T.H. Dudley	Lieut. W.A. Brown	Lieut. A.F. Mahaffy
Capt. R.B. Duggan	Lieut. A.H. Cameron	Lieut. A.G. Mercer
Capt. C.G. Frost	Lieut. W. Carr	Lieut. W.E. Millsap
Capt. G.E. Harley	Lieut. L.A. Carrier	Lieut. W.H. Patterson
Capt. G. Hobson, M.C., M.M.	Lieut. C.H. Colwell	Lieut. G.F. Price
Capt. E.J.K. Norris	Lieut. G.W. Comstock, M.C.	Lieut. L. Richards
Capt. H.J.L. Pearce	Lieut. W.H. Cox	Lieut. D.H. Rose
Capt. J.A. Ramsay	Lieut. L.A. Cuff, D.C.M.	Lieut. A.C. Smith
Capt. H.S. Salisbury, M.C.	Lieut. J.H. Garlick	Lieut. K.S. Stover
Capt. H.M. Sibbald	Lieut. F.J.G. Garneau	Lieut. D. Urquhart
Capt. J. Stonehewer	Lieut. H.E. Hartwick	Lieut. G.A. Urquhart
Capt. L.F. White, M.C.	Lieut. L.G. Howard	Lieut. W.G. Welsford
Lieut. H.deB. Anderson, M.C.	Lieut. D.J. Hutchings	Lieut. A.B. White
Lieut. C.H. Appleby	Lieut. G. Jack, M.M.	Lieut. P.S. Wilson
Lieut. W. Beatty	Lieut. D.S. Jackson	Lieut. L. Withrow

### **THIRD BATTALION, CANADIAN MACHINE GUN CORPS.**

Officer Commanding	Lieut.-Col. W.M. Balfour, D.S.O.	
Second in Command	Major J.C. Hartley, M.C., M.M.	
Adjutant	Captain J.P. Le-Callais	
Assistant Adjutant		
Quartermaster	Hon. Capt. C.M. Hall	
Assistant Q.M.	Lieut. G.C. Rice	
Signalling Officer		
Medical Officer	Captain L.T. Ainley	
Paymaster	Captain E.B. Butler	
Major G.S. Whitaker	Lieut. L.E. Bradford, M.M.	Lieut. R.P.G. Laurence
Capt. W.H. Bothwell	Lieut. O.R. Carson	Lieut. T.R. MacNutt
Capt. F.W. Burnham	Lieut. H.A. Chaddock	Lieut. B.P. McLaine
Capt. J.H. Clark	Lieut. C.L. Clayton, M.C.	Lieut. J.F. MacNeil

Capt. H.E.B. Coyne	Lieut. B.L. Cook	Lieut. P.C. Mulholland
Capt. G.M. Downton, M.C.	Lieut. H.V. Copley	Lieut. R.P. Qua
Capt. K.E. Drinkwater	Lieut. A.G. Fisher	Lieut. A.E. Raymond
Capt. F.M. Garrison	Lieut. H.E. Gee, M.C.	Lieut. L.A. Roe
Capt. A.M. German	Lieut. S.C. Gee, M.C.	Lieut. J.G. Searles, M.C.
Capt. F.E. Hinds, M.C.	Lieut. H.J. Godber	Lieut. J.D. Shearer, D.C.M.
Hon. Capt. &	Lieut. A.V. Hamilton	Lieut. H.F. Smith
Chapl. J.H.T. Holman, M.M.	Lieut. F.M. Hann	Lieut. W.N. Smith
Capt. E.I.H. Ings, M.C.	Lieut. P.M. Henry	Lieut. E.G. Spalding
Capt. K.R. Lindsay	Lieut. R.M. Hett	Lieut. H.H. Strong
Capt. H.L. Logan	Lieut. R.S. Hicks	Lieut. A.W. Taylor
Capt. A.R. Madgett	Lieut. R.M. Hopper	Lieut. J.E. Webber
Capt. J. Thompson	Lieut. F. Hudd	Lieut. F.H. Wheatley, M.M.
Capt. C.W. Tubbs	Lieut. A.G. Johnston	Lieut. F.L. White
Lieut. W.W. Anderson	Lieut. C.W. Kern	Lieut. W.H. Wilson
Lieut. K. Barr		

#### **FOURTH BATTALION, CANADIAN MACHINE GUN CORPS.**

Officer Commanding	Lieut.-Col. M.A. Scott, D.S.O.
Second in Command	Major L.F. Pearce, D.S.O., M.C.
Adjutant	Lieut. A.R. Hill
Assistant Adjutant	Lieut. C.A. Good
Quartermaster	Lieut. F.C. Baird
Assistant Q.M.	Lieut. W.V. Smart
Signalling Officer	Lieut. H.S. Moss
Medical Officer	Captain J.S. Douglas
Paymaster	Captain T.W. Seagram

Major J.C. Britton, D.S.O.	Lieut. G.J. Colwell	Lieut. H.R. Pousette
Major H.A. Fowler, M.C.	Lieut. W.J.A. Fair	Lieut. W. Riddell, M.C.
Capt. H.E. Anderson	Lieut. W.P. Grieve	Lieut. C.J.S. Ryley, M.C.
Capt. T.H.H. Bevan	Lieut. W.R. Hadley	Lieut. C.W. Scott
Capt. S.E. Gudgeon	Lieut. J.T. Hughes	Lieut. J.D. Sharp
Capt. I.C. Hall, M.C.	Lieut. W.L. Isaacs, M.M.	Lieut. A.G. Sinclair
Capt. S. Johnston, M.C.	Lieut. C.W. Kerr	Lieut. A.L. Smith
Capt. W.J. Johnston	Lieut. H. Lewis	Lieut. J.M. Snetsinger
Capt. W.C. Killip	Lieut. C.F. Mandel, M.C.	Lieut. N.A. Sparks
Capt. H.T. Logan, M.C.	Lieut. M.W. McA'Nulty	Lieut. C.S. Spiers
Capt. G.H. Parsons, M.C.	Lieut. W.E. McIntyre	Lieut. P.E. Sweatman
Capt. K. Weaver, M.C.	Lieut. A.H. Middleton	Lieut. L.T. Tingley, M.M.
Capt. W.G. Williams, M.C.	Lieut. H.L. Montgomery, D.C.M.	Lieut. J.C. Veness
Lieut. A.W. Allan, M.C.	Lieut. J.J. Murray	Lieut. W.E. Wilson
Lieut. A.L. Bourque, M.C.	Lieut. T.F. Oliphant	Lieut. W.A. Woodward
Lieut. W.D. Cook	Lieut. C.T. Perkins	Lieut. F.B. Wright
Lieut. G.E.W. Cook	Lieut. G.M. Pomeroy	Lieut. C.A. Young
Lieut. L. Cox	Lieut. N.P. Pope	

#### **1st CANADIAN MOTOR MACHINE GUN BRIGADE.**

Officer Commanding	Lieut.-Col. W.K. Walker, D.S.O., M.C.
Second in Command	Major R.D. Harkness, D.S.O., M.C.
Adjutant	Captain W.W. Main
Quartermaster	Captain J.A. McKinnon
Medical Officer	
Paymaster	Captain E.J. Dickinson, M.C.

Captain G.W. de la P. Beresford	Lieut. J.E. Lodge
Captain J.McC. Cumming	Lieut. A.N. Moore
Captain F.F. Worthington, M.C., M.M.	Lieut. H. Norwick
Lieut. W.D. Brown	Lieut. J.M. Peebles
Lieut. W.G. Cuttle, M.M.	Lieut. W.J. Preston
Lieut. H.R.E. Dye	Lieut. H. Smith, M.C., M.M.

Lieut. J.R. Francis  
Lieut. S.V. Hargreaves  
Lieut. J.E. Hipwell  
Lieut. W. Little

Lieut. W.H. Smith  
Lieut. R.McK. Thomson  
Lieut. C. Thorburn  
Lieut. M.B. Watts

**2nd CANADIAN MOTOR MACHINE GUN BRIGADE.**

Officer Commanding  
Second in Command  
Adjutant  
Quartermaster  
Medical Officer  
Paymaster

Lieut.-Col. H.F.V. Meurling, M.C., D.S.O.  
Major W.T. Trench, M.C.  
Captain A.W. Baker, M.C.  
Captain G.G. Hulme  
Captain R.C. Weldon, M.C.

Captain W. Leary, M.C.  
Captain J. McIsaacs  
Captain F.W. Thompson, M.M.  
Lieut. L.M. Black, M.C.  
Lieut. F.J. Buck  
Lieut. G.E. Couchman  
Lieut. F.E. Cowan  
Lieut. L.W. Dinnie  
Lieut. M. Doig, M.C.  
Lieut. J.A.B. Hoyle  
Lieut. J.F. MacLennan

Lieut. W. Macintyre  
Lieut. G.A. Marshall  
Lieut. W.G. Radford  
Lieut. M.M. Robinson  
Lieut. J.D. Seton, M.C.  
Lieut. F.D. Trenwith  
Lieut. A.W. Tuckwell  
Lieut. W.W. Turple  
Lieut. D.R. Vosburg  
Lieut. A.H. Wylie

**CANADIAN MOTOR MACHINE GUN,  
MECHANICAL TRANSPORT COMPANY.**

Commanding Officer

Major F.G. Arnold  
Capt. G.M. Parker

Workshop Officer

Capt. T.R.C. Young  
Lieut. H.H. Himphries  
Lieut. E.A. Lovett  
Lieut. V.R. Stephenson  
Lieut. F. Wilde

Attached.

Lieut. W.R. Dyer  
Lieut. D.D. Morris

**CANADIAN CORPS MACHINE GUN SCHOOL.**

Chief Instructor

Capt. J.H. Ritchie  
Lieut. A.E. Millward  
Lieut. J.C. McDowell, M.M.  
Lieut. P.A. Green  
Lieut. W.J.A. Stewart

**MACHINE GUN WING.  
CANADIAN CORPS REINFORCEMENT CAMP.<sup>115</sup>**

Commandant

Major T.C. Bamfield  
Lieut. W.D. Darling, M.C.  
Lieut. P.W. Norman  
Lieut. C.W. Torrens

---

<sup>115</sup> Appointments to fill the Establishment authorized on November 1st, 1918, had not been made on November 11th, 1918.

## **INFLUENCE OF CANADIAN CORPS MACHINE GUN POLICY.**

It is difficult to estimate the widespread influence in the Allied Armies of Canadian Corps Machine Gun Policy in Organisation and Tactical Theory.

The great success achieved by the Canadian Corps Machine Gun Barrage in the Battle of VIMY RIDGE gave an impetus to the study and employment of Machine Gun Barrage Fire throughout the whole British Army.

The same event also led the French Army to the study and eventual adoption of this Method of Fire. Immediately before the VIMY RIDGE Operation, the Sub-Chief of the General Staff, French Army, G.H.Q., visited the Canadian Corps and saw the plans for the Attack including the Machine Gun Barrage. After the Attack detailed inquiries were made by the French Military Authorities as to Canadian Machine Gun Methods, and in the Summer of 1917 Overhead and Barrage Fire were adopted as a part of French Machine Gun Tactics. These were introduced as a direct result of the studies pursued by the French General Staff, into Canadian Machine Gun Methods. Lieut.-Col. BRUTINEL was asked to proceed to French G.H.Q. at CHALONS to give further exploration of our M.G. Fire Tactics.

Officers of the American and Italian Armies also were attached for Instructions on different occasions, to units of the Canadian Machine Gun Corps, with a view to acquiring a knowledge of Canadian Machine Gun Fire Methods and Machine Gun Organisation.

## **CANADIAN AND BRITISH MACHINE GUN POLICY.**

The Machine Gun Policy of the Canadian Corps, explicitly set forth in the Corps Commander's letter of April 30th<sup>116</sup>, was very far in advance of the published policy of General Headquarters. British Machine Gun Companies were formed into a Battalion of 4 Companies in each Division, in April, 1918. The G.H.Q. letter<sup>117</sup> authorizing the adoption of this Organisation stated that "the O.C. Machine Gun Battalion will be responsible under the orders of the Divisional Commander for the discipline, administration and training of the Battalion." But no tactical control was given the Battalion Commander at this time.

During the succeeding months the British Machine Gun Corps and the various British Armies pressed continuously for a clear definition of Machine Gun Policy; this was finally given on November 2nd, 1918 in the following British G.H.Q. letter<sup>118</sup> addressed to the FIRST, SECOND, THIRD, FOURTH and FIFTH ARMIES:-

1. "With reference to M.G./2 of the 7th June 1918, dealing with certain matters in connection with the organization and command, etc. of machine gun units, it would appear that there is a tendency in some cases to look upon a machine gun battalion mainly as an administrative organization. The machine gun battalion is in fact, a tactical unit, and the machine gun battalion commander is a tactical commander. This is not altered by the fact that machine gun companies or sections must be frequently detailed to work in the closest co-operation with Infantry Brigades. Only under exceptional circumstances will it be necessary or expedient to attach machine gun units to Infantry Brigades, much less to Infantry Battalions."
2. "The duties of the Divisional Machine Gun Battalion Commander in respect to the machine guns may be looked upon as closely analogous to those of the C.R.A. of a Division in respect to the Artillery. The Machine Gun Battalion Commander is available to advise the Divisional Commander, through the General Staff of the Division, on all matters connected with the Divisional plans of machine gun action, whether in offence or defence; and the executive arrangements for the Divisional Commander's plan of machine action are also the responsibility of the Machine Gun Battalion Commander."
3. "In order that the fullest value may be obtained from the Divisional Machine Gun Battalion, any rigid plan of distribution and any permanent attachments must be avoided, and portions of the Battalion must be distributed and re-distributed in accordance with the tactical requirements for the time being, taking into consideration the Divisional Front as a whole. This will necessarily involve central control of arrangements regarding reliefs and such

---

<sup>116</sup> Canadian Corps G.126/3-6 dated April 30th, 1918.

<sup>117</sup> O.B./407 dated February 19th, 1918.

<sup>118</sup> O.B./407 dated November 2nd, 1918.

matters. It must be realized by all Commanders that machine guns temporarily allotted for specific tactical purposes are likely to be withdrawn on completion of their tasks.”

4. “Machine Gun Units detailed to co-operate with Infantry Brigades for offensive operations, or located in Brigade Sectors in the defence, will be under the tactical control of the Infantry Brigade Commander concerned. In view, however, of the necessity of considering the Divisional plan of Machine Gun action as a whole it may be necessary to place certain restrictions upon the Infantry Brigade Commander in respect of altering the dispositions of tasks of machine guns in his sector, either in attack or defence: such restrictions must be made clear to the Commander concerned. In the event of a new and unforeseen tactical situation arising to meet which no provision has been made in the original rules allotted in the Divisional plan to units of the Machine Gun Battalion, it is the duty of the Infantry Commanders to inform superior authority immediately of any fresh orders which they may issue to the Machine Gun Units co-operating with them, or of any action which they may take in this connection.”
5. “All Machine Guns retained under direct Divisional control will receive orders from the Machine Gun Battalion Commander.”

This letter is in complete accord with what the originators of Modern Machine Gunnery in the British Army had long desired, and with what had become the practice in the Armies during the latter months of 1918. The Machine Gun Battalion was recognized as a Tactical Unit and the Machine Gun Battalion Commander as a Tactical Commander.

The principles underlying this letter are those principles of Command and Tactical Handling which had governed the activities of the Canadian Machine Gun Corps during 6 months of arduous fighting. No more striking illustration could be found of the soundness of Canadian Machine Gun organisation and Theory of Command than the adoption by General Headquarters of these essential principles which, initiated by the Canadian Corps, affected so deeply the development of Machine Gun Tactics and the whole future of Machine Gun Science.